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No. 39] NEW DELHI, SATURDAY, SEPTEMBER 24, 1988 (ASVINA 2, 1910)

(इस भाग से भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके)
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

भाग III--खण्ड 2

[PART III--SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस
[Notification and Notices issued by the Patent Office Relating to Patents and Designs]

THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 24th September 1988

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CORRIGENDUM

In the Gazette of India Part III, Section 2 dated 7th May, 1988 under Patent application No. 162341, delete "Convention date 24th December, 1982 Great Britain" and treat as ordinary Patent application.

APPLICATION FOR PATENTS FILED AT
THE HEAD OFFICE

234/4, ACHARYA JAGADISH BOSE ROAD
CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed under Section 135, of the Patents Act, 1970.

The 18th August 1988

- 691/Cal/88. Om Chandra Kafley. The Process for the manufacture of Amala Rush-Cold Drink from Amala.
- 692/Cal/88. Lingaraj Patnaik. Auxiliary control buses in MCC for sequential starting and stopping of electric drives with time delays.
- 693/Cal/88. Georg Fischer Aktiengesellschaft. A method for obtaining impurity from molten iron having impurities. [Divisional dated 30th January, 1985]

The 19th August 1988

- 694/Cal/88. Lummas Crest Inc. Pyrolysis Heater.
- 695/Cal/88. Personal Products Company. Winged napkin having cross-channeling.
- 696/Cal/88. Washington University Technology Associates, Inc. A method for granulation of a powdery material, granulated product obtained thereby and apparatus for carrying out said process. [Divisional dated 23rd February, 1987].
- 697/Cal/88. IEL Limited. Novel process for the enzymatic preparation of monoglycerides suitable for the conversion to alkyl resins.

APPLICATIONS FOR PATENTS FILED AT
THE PATENT OFFICE BRANCH
MUNICIPAL MARKET BUILDING, THIRD FLOOR
KAROL BAGH, NEW DELHI-5

The 1st August 1988

- 655/Del/88. Associated Electronics Research Foundation, "B&W TV chassis RFC-3 (Research Foundation Chassis-3)".
- 656/Del/88. Associated Electronics Research Foundation, "Integrated security system, Model No. AERF/COM/6703".
- 657/Del/88. Allied-Signal Inc., "High impact, styrenic polymer/thermoplastic polymer grafted blends".
- 658/Del/88. Imperial Chemical Industries PLC., "Shaped primer". (Convention date 21st August, 1987) (U. K.).
- 659/Del/88. The B. F. Goodrich Company, "Removing fines from mass resins".
- 660/Del/88. Lesbar Pty. Ltd., "A device and method for imparting orbital motion to a wheeled carriage". (Convention date 4th August, 1987) (Australia).
- 661/Del/88. GEC Plessey Telecommunications Limited, "Echo canceller". (Convention date 14th August, 1987) (U. K.).

The 2nd August 1988

- 662/Del/88. Council of Scientific and Industrial Research, "Improved process for making flexible graphite foil from natural graphite".
- 663/Del/88. Council of Scientific and Industrial Research, "Multi fuel-film burner".
- 664/Del/88. Olin Corporation, "Process for removing aluminum from concentrated alkali metal halide brines".
- 665/Del/88. Alcan International Limited, "Tamper-evident structures".

The 3rd August 1988

- 666/Del/88. Bharat Heavy Electricals Limited, "A batch type method of pneumatically pumping granulated materials and a batch type pneumatic pump for carrying out the method".
- 667/Del/88. Shri Ram Institute for Industrial Research, "Towels".
- 668/Del/88. Chief Controller of Research and Development, "A water purifier straw".
- 669/Del/88. The Lubrizol Corporation, "Improved dispersant salt composition". [Divisional date 18th December, 1985].
- 670/Del/88. Sanden Corporation, "Wobble plate type compressor".
- 671/Del/88. Spetsialnoe Konstruktorsko-Tekhnologicheskoe Bjuro Po Konstruirovaniyu Oborudovaniya I Priborov Dlya Ochistki Promyshlennykh Stoknykh Vod, "KAZMEKHANOB". "Apparatus for measuring hydrogen cyanide vapour content in the air".
- 672/Del/88. GEC Mechanical Handling Ltd., "Airbridge". (Convention date 3rd August, 1987) (U. K.).

The 4th August 1988

- 673/Del/88. Council of Scientific and Industrial Research, "An electrochemical preparation of chlorotoluenes employing precious metal oxide coated anode".
- 674/Del/88. Council of Scientific and Industrial Research, "Expendable bit for the installation of horizontal drains for preventing landslides".
- 675/Del/88. Council of Scientific and Industrial, "An electronic probe for the detection of metal embedded in earthen embankments".
- 676/Del/88. The University of Sydney & the Electricity Commission of New South Wales, "Pulverised fuel burner". (Convention date 13th August, 1987) (Australia).
- 677/Del/88. Elconnex Pty. Ltd., "Corrugated pipe connector and method of molding. (Convention date 4th August, 1987) (Australia).

APPLICATIONS FOR PATENTS FILED AT
THE PATENT OFFICE BRANCH,

61, WALLAJAH ROAD, MADRAS-600 002

The 1st August 1988

- 548/Mas/88. Lankalapalle Rammohan Rao. (A) Multi-Cathode Fluorescent tubes and lamps (B) Filament/Cathodeless fluorescent tubes and lamps (The same A & B above applies to sodium vapour and hallogen tubes and lamps).
- 549/Mas/88. L. Rammohan Rao. Improvements relating to match sticks.
- 550/Mas/88. Chevron Research Company. Production of low pour point lubricating oils.

551/Mas/88. V. P. Nayar. A special mortar to fix wire-cut and sand-lime bricks to be patented as tilak Mortar.

The 2nd August 1988

552/Mas/88. V. P. Nayar & P. Viswathan Nair. A tapping panel paste for rubber trees under tapping.

553/Mas/88. IDL Chemicals Limited. A premix preparation for road work

554/Mas/88. System Stecko Limited. Laminated cotter pin or locking staple and couplings and connections incorporating it. (August 4, 1987; United Kingdom).

555/Mas/88. State of Israel. Optical Isomers.

The 3rd August 1988

556/Mas/88. Laboratories Delagrange. 1, 4-Dihydropyridines, process for preparation thereof and their application as medicinal products.

557/Mas/88. Minnesota Mining and Manufacturing Company. Interconnected semiconductor devices.

558/Mas/88. Fellows Corporation. An apparatus for compensating for thermal expansion or contraction of a machine component along an axis. (September 17, 1984; Canada). (Divisional to Patent Application No. 249/Mas/85).

550/Mas/88. Akzo nv. Process for preparing polyvinyl alcohol yarn.

The 4th August 1988

560/Mas/88. V. P. Nayar & P. Viswanathan Nair. A multipurpose protective and anti-corrosive coating material in viscous liquid form.

The 5th August 1988

561/Mas/88. Nederlands Omroepproductie Bedrijf N. V. connecting means for electrical information containing signals and method for manufacturing the same.

562/Mas/88. Kabushiki Kaisha Toyota Chuo Kenkyusho. Method and apparatus for surface treatment.

The 8th August 1988

563/Mas/88. Dr. P. A. Kurup, M.Sc., Ph.D and Dr. P. G. Kurup, B.Sc., M.B.B.S., M.R.C.P. The preparation of biscuits to be called Antidiabetic biscuits (ADB).

564/Mas/88. Shell Internationale Research Maatschappij B. V. Removal of sour components from a gas stream.

565/Mas/88. Natural Environment Research Council of Polaris House. Expression Vectors for the synthesis of Proteins and Plasmid Replicons and sequence Cassettes for use in Constructing such Vectors. (August 12, 1987; U.K.).

The 9th August 1988

566/Mas/88. Scovill Japan Kabushiki Kaisha. Fastener Attaching Apparatus.

567/Mas/88. Maschinenfabrik Rieter AG. A method of and apparatus for fault clearance at work stations of a textile machine.

568/Mas/88. Sumitomo Electric Industries, Ltd. Optical fiber cable.

569/Mas/88. Schubert & Salzer Maschinenfabrik Aktiengesellschaft. An open and spinning arrangement and a method of starting such an arrangement.

The 10th August 1988

570/Mas/88. Corning Glass Works. Chemically durable, high index, low density glasses.

571/Mas/88. Mobil Oil Corporation. Toluene Disproportionation.

572/Mas/88. Davy McKee Corporation. Gas Mixer and Distributor for Reactor.

573/Mas/88. Davy MacKee Corporation. Production of synthesis gas from hydrocarbonaceous feedstock.

The 11th August 1988

574/Mas/88. P. Chidambaram, D. G. Gopal and (Mrs.) Ravi Chellam of Sri Sarada Industries. A device for locking a container on to a vehicle to prevent vertical movement of the container relative to the vehicles and for unlocking the container when required.

575/Mas/88. A. Ahlstrom Corporation. Friction surface for packing foil or like with friction surface.

576/Mas/88. Ametex AG. Profiled plastic band.

577/Mas/88. Mobil Oil Corporation. Two stage synthesis of zeolites.

578/Mas/88. S A M M—Societe D' Applications Des Machines Motrices. Hydropneumatic suspension unit for wheeled vehicles, particularly cross-country vehicles.

The 12th August 1988

579/Mas/88. K. A. Raughachary. 440v AC 4F Tube Lamp.

580/Mas/88. Saint-Gobain Vitrage. Process and Apparatus for the Production of Fused glass.

581/Mas/88. Natural Environment Research Council of Polaris House. Expression Vectors for the synthesis of Proteins and Plasmid Replicons and Sequence cassettes for use in constructing such vectors.

(August 12, 1987; U.K.).

ALTERATION OF DATE

163443.

(124/Del/85)

Ante dated to 7th September, 1981.

OPPOSITION PROCEEDINGS

An opposition, entered by the Associated Cement Companies Limited to grant of a patent on an application for Patent No. 161484 made by Dalmia Cement (Bharat) Ltd., as notified in Part III Section-2 of the Gazette of India, dated 28th May, 1988 has been deemed to have not been launched.

PATENTS SEALED

140301	149661	152315	153168	157808	157809	157990
158147	158319	159191	159194	159770	159772	159819
159893	160003	160056	160091	160109	160167	160213
160214	160215	160226	160235	160291	160328	160629
160694	160795	161037	161040	161062	161078	161090
161117	161159	161180	161181	161182	161218	161220
161230	161244	161245	161248	161255	161256	161260
161264	161267	161268	161281	161300	161301	161316
161319	161332	161339	161340	161341	161342	161345
161346	161349	161350	161351	161352	161353	161354
161355	161356	161357	161358	161442	161613	161629
161644	161649					

COMMERCIAL WORKING OF PATENTED INVENTIONS

ELECTRICAL ENGINEERING LIST— II. (CALCUTTA)

The following patents in the field of Electrical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1	2	3	4
143932	16-2-1976	Ajit Kumar Bhattacharya, Block No. 9/5, Citizens Co-op Hsg., 103, Manicktola Main Road, Calcutta-700 054, West Bengal.	A combustion such as employed in an automobile dynamo and like dynamo and method of manufacture thereof.
145327	30-5-1975	Aluminium Pechiney, 23 Rue de Bonnel, 69003 Lyon, France.	Apparatus continuously determining the internal resistance of an electrolysis cell.
151875	11-2-1980	Do.	A process for production of aluminium by igneous electrolysis of a solution of aluminium in cryolite Tanks and an apparatus for the same.
158317	1-10-1982	Do.	A device for the precise adjustment of the anode plane of an electrolysis cell for the production of aluminium.
153478	17-7-1981	American Cyanamido Company, Wayne, New Jersey, U.S.A.	Electrochromic display device.
151988	16-5-1979	American Standard Inc., 40 West 40th Street, New York, 10018, U.S.A.	Dynamic/Friction brake blanding control system.
156900	9-8-1982	Do.	Pulse code data transmission system for railway track circuits.
157152	24-8-1982	Do.	Dual control trailable railway switchmachine.
144823	7-4-1976	Asahi Glass Co., Ltd., No. 1-2, Marunouchi 2-chome, Chiyoda-ku, Tokyo, Japan.	Electrolytic cell.
155085	13-11-1981	Do.	Alkali metal chloride electrolyzing cell.
152688	22-5-1981	Barr & Stroud Ltd., Caxton Street, Anniesland, Glasgow G 13 1 HZ, Scotland.	A waveform generator.
154209	25-4-1981	Do.	Infrared radiation detecting device.
154270	22-5-1981	Do.	A signal processing system.
154358	22-5-1981	Do.	A thermal imager.
154661	2-7-1981	Do.	Optical coating.
155796	25-3-1982	Do.	Laser rangefinders.
148348	16-2-1978	Chlorine Engineers Corpn. Ltd., No. 2-5 Kasumigaseki 3-Chome, Chiyoda-ku, Tokyo, Japan.	Bipolar electrode
151251	2-3-1978	Do.	Bipolar electrode and method for producing the same.
152104	7-3-1980	Chloride Group Ltd., 52, Grosvenor Gardens, London, SW 1 W OAU, England.	Electric batteries.
152628	8-5-1980	Do.	Recombinant lead acid electrical storage batteries.
152648	8-5-1980	Do.	A multicell electric storage battery.
152669	7-3-1980	Do.	Lead acid electric storage battery.

1	2	3	4
152679	8-5-1980	Chloride Group Ltd., 52, Grosvenor Gardens, London, SW 1 W OAU, England.	A method of making a recombinant lead acid electric storage battery of cell.
154232	12-11-1981	Do.	Vent for electric storage battery.
147919	19-4-1978	Chugai Denki Kogyo Kabushiki Kaisha, 13/3 Nihonbashi-Kayabacho, 2-Chome, Chuo-ku, Tokyo, Japan.	A method of making improved Ag-metal oxides electrical contact materials.
149830	25-7-1978	Do.	Apparatus for making a bi-metallic electrical contact.
147069	22-12-1976	Contraves A.G., Schaffhauserstrasse 580, 8052 Zurich, Switzerland.	A combination of a vehicle and an electrical power generating set.
154436	3-7-1981	Corning Glass Works, Houghton Park, Corning, New York—14830, U.S.A.	An optical waveguide soot preform and method of making.
154809	23-2-1979	Do.	Multi-component optical waveguide having index gradient.
154898	26-7-1979	Do.	A method of forming a preform for a high bandwidth optical filament.
141071	6-1-1975	Dr. Beck & Co., AG., of 2000 Hamburg 28, Grossmonnstrasse 105, F.R.G.	A method of insulating electrical conductors
143183	12-7-1976	Dr. C. Otto & Co., GMBH., 463, Bochum, West Germany.	Battery of coke ovens with regenerative heat exchange.
155263	8-8-1980	Degusso AG., Frankfurt/Main 6450 Hansu 1, Postfach, F.R.G.	A process for producing an electrical contact based on silver and tin oxide.
155846	4-12-1981	Do.	Material for electrical contacts.
144230	5-10-1976	General Electric Company, 1, River Road, Schenectady 5, New York, U.S.A.	A prime mover control system.
144647	27-10-1976	Do.	Apparatus for collecting byrolsates from a gas cooled dynamoelectric machine.
145970	8-6-1976	Do.	Reactor corp.
146133	3-7-1976	Do.	Gas cooled flux shield for dynamo electric machine.
153617	27-3-1981	Do.	An electrical capacitor electrode foil method of manufacturing the same and an electrical capacitor having such foil.
154216	24-6-1981	Do.	Electric power supply system more particularly to power supply or electrically propelled traction vehicles.
156661	4-2-1982	Do.	An electrical capacitor.
157610	20-9-1982	Do.	Improved system for optical pattern recognition for reading out line patterns of arbitrary shape orientation and location from a pattern carrying medium.
158340	2-9-1982	Do.	System for providing protection for a high voltage transmission line.
143928	18-9-1975	Gould Inc., 10 Gould Center, Rolling Meadows, Illinois 60008, U.S.A.	Grid for use in lead acid batteries and lead batteries containing the same.
146014	11-2-1976	Do.	Explosion proof gang vent for closing the cell opening of a storage battery.
146033	3-10-1975	Do.	A lead acid battery.
146034	10-9-1975	Do.	Maintenance-free lead acid storage battery.
146035	10-9-1975	Do.	Lead acid battery.

1	2	3	4
152742	4-9-1980	Gould Inc., 10 Gould Centre, Rolling Meadows, Illinois 60008, U.S.A.	A Process for the preparation of a battery grid useful for supporting electrochemically active material in a lead-acid battery.
153747	3-9-1981	Do.	Vent plugs for batteries.
154278	1-10-1981	Do.	A maintenance from sealed lead acid cell.
154456	19-3-1981	Do.	A battery.
155236	5-3-1982	Do.	Lead-acid storage batteries.
155459	20-10-1981	Do.	Lead-acid batteries for float applications.
156874	23-12-1981	Do.	Battery vent plug.
143408	27-8-1976	Hoechst AG, 6230, Frankfurt/Main 80, West Germany.	Electrolytic apparatus for production of chloride from aqueous alkali metal chloride.
152456	7-4-1980	Do.	Process for the dechlorination and cooling of the anolyte of the alkali metal chloride electrolysis by pressure release.
152756	5-3-1980	Do.	Electrolysis apparatus.
156139	25-3-1982	Do.	Electrolytic cell.
150270	29-1-1979	ICI Ltd., Imperial Chemical House, Millbank, London SW 1 P, 3JF, England.	Apparatus for selectively activating a plurality of electrical loads at pre-determined relative times.
151012	19-1-1979	Do.	An electrical ignition assembly.
152055	7-5-1979	Do.	Electrically actuable ignitor assembly and method of constructing such an assembly.
153548	1-1-1980	Do.	Fusehead ignitor assembly.
156372	1-5-1981	Do.	Electrolytic cell of the filter press type.
157676	16-12-1981	Do.	A device for initiating explosion.
147951	6-7-1978	IMI Marston Excelsior Limited, Wobaston Road, Fordhouses, Wolverhampton WV10, 6QJ England.	Electrical connector.
153553	7-1-1980	Do.	Impressed current cathodic protection anode assembly.
145446	17-1-1977	Johnson & Johnson, 501, George Street, New Brunswick, New Jersey, U.S.A.	An electrode providing electrical contact with a patents skin.
150864	1-1-1980	Do.	Grounding electrode.
149034	17-3-1978	Kraftwerk Union AG., 4330, Mulheim (Ruhr), Wiesenstr 35, F.R.G.	Method of bracing winding and turns of an electric machine.
154942	2-12-1981	Do.	Electrohydraulic adjusting drive for turbine valves.
158584	1-5-1984	Do.	Power station including an integrated coal gasification plant and organic chemical synthesis plant (s).
149498	23-6-1977	Maillefer S.A., Route des Bois, 1024, Ecublens, Canton of Vaud, Switzerland.	Method and apparatus for manufacturing electric wire having wire-enamel-type insulation.
149499	23-6-1977	Do.	Method of manufacturing insulated electric wire of the enamelled-wire type extrusion.
156644	22-9-1982	Metallgesellschaft AG., 16 Frankfurt AM, Reuterweg, West Germany.	A membrane electrolysis cell.
157978	22-7-1983	Do.	Vertically extending plate electrode and an assembly including the same for use in gas-forming electrolyzers.

1	2	3	4
156392	30-3-1982	Mitsubish Denki Kabushiki Kaisha, No. 2-3, Marunoushi, 2-chome, Chiyoda-ku Tokyo, Japan.	Terminal connecting device.
150376	18-12-1978	Moteus Leroy- Somer Boulevard Marcellin Leroy 16000, Angoulene, France.	A system for regulating the terminal voltage of an independent variable speed alternating current generator.
150544	6-10-1978	Outokumpu oy of Outokumpu, Finland.	Process for selective removal of Bismuth and Antimony from an electrolyte especially in electrolytic refining of copper.
146118	12-9-1977	Peico Electronics & Electricals Limited, Shivsagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400 018, Maharashtra, India.	Pus-push switch.
153847	26-12-1980	Permelco Electrode Ltd., No. 2-5, Kasumigaseki, 2-Chome, Chiyoda-ku, Tokyo, Japan.	Electrolysis apparatus using a diaphragm of a solid polymer electrolytic and method for production thereof.
156293	22-9-1979	Do.	Electrode for use in electrolysis of aqueous solutions of metal halides.
156926	20-7-1982	Do.	Ion exchange membrane electrolytic apparatus and process for producing the same.
151437	31-5-1979	Rosemount Inc., 12001, West 78th Street, Eden Prairie, State of Minnesota, U.S.A.	Two wire current transmitter with improved voltage regulator.
156305	22-1-1982	Do.	Circuit for measuring the reactance of an AC reactance.
140386	6-3-1975	Siemens AG., Berlin & Munich, West Germany.	An electromagnetically operable switch arrangement.
140869	4-2-1975	Do.	Electromagnetically operable switch gear.
144693	26-2-1976	Do.	Automatic control circuitry for apparatus affected by dead time.
146293	4-11-1976	Do.	Digital data processing arrangements more particularly for railway safety engineering.
147445	12-7-1977	Do.	Alternating current regulator.
147879	24-5-1977	Do.	Electric switch gear.
148531	13-5-1977	Do.	Brushless synchronous machine.
148688	28-10-1977	Do.	Safety out put unit for a data processing installation.
149558	14-7-1982	Do.	Apparatus for bit error quota measurement in a digital transmission system.
150132	26-6-1979	Do.	High voltage switchgear.
150381	18-4-1979	Do.	Electrical switchgear.
151126	13-2-1979	Do.	A device or monitoring angular position such as in a numerical control system for a machine tool.
151260	4-5-1979	Do.	Support framework for electrical or electronic equipment.
151378	19-10-1978	Do.	A high voltage switching installation.
151392	9-11-1978	Do.	Device for indicating the level of a conveyor at different heights for example in mining.
151394	7-6-1979	Do.	Electric contact assembly.
151770	23-9-1980	Do.	Device for damping oscillation in regulated electric machine.
151947	23-5-1980	Do.	High-voltage electrical switch.

1	2	3	4
152093	18-3-1980	Siemens AG., Berlin & Munich, West Germany.	Protective relay having means for altering a switching contact arrangement thereof.
152105	13-3-1980	Do.	A control device for regulating an asynchronous electrical machine.
152461	18-11-1980	Do.	Electromagnetic switching device.
152462	11-12-1980	Do.	A two-channel data processing system.
152690	4-7-1981	Do.	A modular telecommunication system for exchanging data between any pair of a multiplicity of data terminals.
152817	13-3-1980	Do.	A pulse-width multiplier device.
153044	4-7-1981	Do.	A modular telecommunication system.
153349	14-5-1981	Do.	A control device for use in controlling two-way rectifier.
153469	11-3-1980	Do.	Thermally responsive protective relay.
153641	11-3-1980	Do.	Device for remote operation of push button particularly for switchgear.
153850	24-2-1981	Do.	A device for transmission of signals from an apparatus nearby railway track of railway vehicles.
154045	20-7-1981	Do.	A device for use in bridging brief mains failures in a voltage intermediate circuit static frequency changer.
154101	4-2-1981	Do.	A turbine set for generating and supplying electricity at a constant frequency to a net work.
154167	4-7-1981	Do.	A modular telecommunication system.
154602	6-5-1982	Do.	An X-ray examination device.
154790	4-7-1981	Do.	A modular telecommunication system.
154906	23-12-1981	Do.	A device for speed determination of a rotary shaft.
155068	10-9-1981	Do.	Apparatus for signalling in PBX systems.
155470	23-12-1981	Do.	A medium voltage electrical load switching device.
155801	20-5-1982	Do.	An X-ray examination device.
156043	8-2-1982	Do.	Electrical generating apparatus.
157359	6-8-1982	Do.	Contact arrangement for electrical switching device.
157860	21-4-1983	Do.	A contact arrangement.
157926	24-1-1983	Do.	An improved polyolefin based electrical insulating composition.
157927	24-1-1983	Do.	An improved polyolefin based electrical insulating composition.
157976	19-4-1983	Do.	A contact arrangement suitable for an electrical switch.
152708	29-9-1980	Societe Des Electrodes Et Refractaires savoce (SFRS), 12 Rue du General Foy, 75008, Paris, France.	A new nipped joint for a furnace electrode.
153946	30-10-1980	The Jacobs Manufacturing Company, 22 East Dudleytown Road, Bloomfield, Connecticut 06002, U.S.A.	Improved solenoid.

COMMERCIAL WORKING OF PATENTED INVENTIONS

MECHANICAL LIST NO. II (CALCUTTA)

The following Patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name and Address of the Patentee	Title of the Invention
1	2	3	4
143740	21-2-1976	Ajitkumar Bhattacharya, C/o S. S. Bhattacharya, Block No. 9/5, Citizens Co-operative Housing Society, 103, West anicknola Main Road, Calcutta-700 054, 1st Bengal.	An improved rotating centre.
149676	15-3-1978	Aluminium Pechinery, 28 Rue de Bonnel, 69003 Lyon, France.	A pneumatic conveying apparatus for conveying pulverulent material.
152373	9-5-1980	Do.	Apparatus for the dust free handling of poder substance.
146518	23-9-1976	American Standard Inc., 40 West, 40th St., New York, 10018, (U.S.A.)	Brake control valve device with movable control reservoir charging valve.
147938	24-9-1977	Do.	An absorbing apparatus in a draft-gear for rail road cars,
150945	13-10-1978	Do.	Housing for draft gear.
143915	10-12-1975	Arbrook, Inc., 2500 Arbrook Boulevard, Arlington, Texas, (U.S.A.)	A method of treating medical and surgical instruments household objects, to render them sterile.
154338	12-6-1980	Automotive Products PIC., Tachbrook Road, Leamington SPA, Warwickshire CV 31 3ER, England.	Ball and socket joints.
153955	5-3-1981	Barr & Stroud Ltd., Caxton Street, Anniesland, Glasgow, G13 1HZ, Scotland.	A focal refractor telescopes.
154125	28-9-1981	Do.	A focal refractor telescope.
154154	28-3-1981	Do.	Collimation lens system.
154900	28-9-1981	Do.	A focal dual magnification refractor telescopes.
154940	29-5-1981	Do.	A focal zoom refractor telescope.
155962	15-5-1982	Do.	A system of improved tracking link.
156676	25-11-1982	Do.	Optical scanning systems.
154038	31-1-1981	Battelle Development Corporation, 505 King Avenue, Columbus, Ohio 43201, U.S.A.	A method for generating and super heating steam and apparatus therefor.
157400	12-7-1982	Beecham Inc., 65 Industrial South Clifton, New Jersey, 07012 U.S.A.	Multi-phase toothpaste and method of making the same.
149944	3-7-1978	Biomechanics Limited, Smarden, Ashford, Kent, England.	A method of treating biodegradable waste material by anaerobic digestion and an apparatus for carrying out the said method.
151957	26-5-1979	British Railway Board, 222 Marylebone Road, London NW1 (England.)	Railway Vehicles.
152955	18-8-1980	Do.	A railway vehicle or bogie.
153321	5-9-1981	Do.	measuring Vehicles for Roadways.
155423	7-7-1981	Brown & Williamson Tobacco Corporation 1600 West Hill Street, Louisville, kentucky-40232, U.S.A.	Apparatus for making grooves in Tobacco smoke filters.

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155856	3-2-1983	Brown & Williamson Tobacco Corporation 1600, West Hill street, Louisville -Kentucky- 40232, U.S.A.	Cigarette filter.
157633	2-2-1983	Do.	Improvements relating to Tobacco smoke filters.
143617	15-11-1974	Clupak, Incorporated, of 530 Fifth Avenue, New York, State of New York, 10036, U.S.A.	Web compacting apparatus incorporating improved lubricating means.
144816	12-2-1976	Do.	High Bagasse Content Newsprint paper and method for making the same.
149786	24-5-1976	Do.	Nip roll for treating web material and method of manufacturing the same.
157533	3-11-1982	Compagnie Financiere, 16 Avenue de Des Cardans, a Republic, 92503, Rueil-Malmaison, France.	Articulation device having a double universal joint and a ball joint unit.
146882	22-12-1975	Contraves A. G., Schaffhauserstrasse 580, 8052 Zurich, Switzerland.	An assembly which can be used as a ramp.
151417	23-2-1979	Corning Glass Works of Houghton Park Cor- ning, New York-14830 U.S.A.	An optical waveguide and a method of making the same.
152644	28-2-1980	Do.	Apparatus for forming an optical waveguide blank.
156528	26-7-1979	Do.	A perform for a high band width optical filament.
152101	14-12-1979	C.P.C. International Inc., International Plaza, Englewood, Cliffs, New Jersey, 07632, U.S.A.	Apparatus for fluidized bed drying of starch.
152345	17-3-1980	Do.	Improvement in fluidized bed apparatus.
151377	19-12-1980	Denki Kagaku Kogyo, K. K., 4-1 Yuraku Cho, 1-Chome, Chiyoda-Ku, Tokyo, Japan.	A vertical type thermal decomposition furnace used for producing carbon black.
153610	18-12-1980	Do.	Improved process for the production of carbon black.
154522	12-12-1980	Do.	Cooling apparatus useful in the production of carbon black.
143275	31-3-1975	Dr. C. Otto & Comp., GmbH, 463 Bochum, West Germany.	A coke guide machine movable on the coke side of coke oven batteries.
143499	1-2-1975	Do.	Underjet coke over batteries.
144112	10-2-1977	Do.	Device for discharging dusty gases resulting from the pushing of cooking ovens.
146160	15-3-1977	Do.	Apparatus for cleaning the doors of cooking.
148622	20-4-1978	Do.	A method for taking in an and taking away gases leaking during coking and a device therefor.
148626	3-4-1978	Do.	Means for supporting the battery decking of underjet coke ovens.
152170	30-5-1981	Do.	Closing and opening device for use in coke ovens.
152515	7-12-1979	Do.	Vertical chamber for the continuous dry quenching of coke.
152680	2-6-1980	Do.	A method of renewing the brickwork of coke ovens.
152766	31-10-1980	Do.	Coke gas for coke ovens.
153268	2-6-1980	Do.	A coke over battery.

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153277	4-12-1980	Dr. C. Otto & Comp. GmbH, 463 Bochum West Germany.	Door extractor for the closures of horizontal coke ovens.
153338	2-6-1980	Do.	Extraction of gases evolved in the charging of coke ovens.
153339	24-11-1980	Do.	Coke oven battery adapted to be regeneratively heated by lean gas or rich gas at choice.
153570	25-2-1980	Do.	Nozzle provided with several outlet apertures for coke ovens.
155623	12-2-1981	Do.	Apparatus for dry cooling of hot raw coke.
156936	24-12-1982	Do.	Heating system for the regenerative heating of a coke oven battery having twin heating flues.
158142	15-2-1983	Do.	A temperature measuring means for coke oven chambers walls.
146438	24-12-1976	DRG(UK) Limited, 1, Redcliffe Street Bistol, England.	A method of assembling a printing roll comprising sleeve and a role core and a detachable sleeve printing roll obtained.
146439	22-6-1977	Do.	A method of producing a printing roll and the roll so produced.
150301	18-6-1979	Dr. Werner Freyberg Chemische Fabrik Delitia Nachf, Bergshasse 6941, Laundenbach, F.R.G.	Application means for pest control agents.
156296	18-6-1979	Do.	Applicator apparatus for pest control agents.
148753	19-8-1977	Dunlop Limited, Dunlop House, Ryder Street, St. Jame's London SW1, England.	Improvements in or relating to springs.
139370	9-8-1975	E.I. Du Pont De Nemours & Co., Wilmington, Dalaware, U.S.A.	Improvements in and relating to compartmental package and process for forming such package.
149159	6-12-1977	Do.	Low energy explosive connecting cord and cord manufacturing method and apparatus.
150363	9-8-1978	Do.	A method of anchoring or ring or fixing a reinforcing member in a hole and a compartmental package grouting system for use therein.
152279	28-1-1980	Do.	Process for preparing security paper from film-fibril sheets and security paper made by the said process.
152674	7-4-1980	Do.	Delay blasting cap for underground and openwork blasting operation.
153947	6-11-1980	Do.	A compartmented grout cartridge for use in anchoring a reinforcing member in a hole.
147887	23-11-1977	Eisenwerk Gesellschaft Maximilianshutte mbH 8458, Sulzbach, Rosenberg West Germany.	A method of and apparatus for constructing refractory brick linings and tuyere plates of vessels for treating and in particular refining metal melts.
149859	7-12-1978	Do.	Method of improvement of the heat-balance in the refining of steel.
142891	18-8-1976	Ethicon Inc., Sommerville, New Jersey, U.S.A.	Surgical adhesive tapes.
145409	14-12-1976	Do.	Absorbable surgical suture and a process for preparing same.
149040	25-5-1978	Do.	A package for multistrand surgical suture.

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151717	4-5-1978	Ethicon Inc., Sommerville, New Jersey, U.S.A.	Bonded controlled release needle-suture and a method of preparing same.
151996	12-2-1980	Do.	A hemostatic plastic clip.
152006	12-2-1980	Do.	Instrument for applying ligating clips.
155971	16-7-1982	Do.	An improved ligating clip package.
156383	7-2-1983	Do.	An improved retainer for needled surgical sutures.
156669	21-7-1982	Do.	An improved cartridge for hemostatic clips.
157021	8-3-1983	Do.	Retainer for sterile surgical products.
157451	10-3-1983	Do.	Means for removably securing a plurality of sterile curved surgical needles substantially in the same plane and a package therefor.
157718	15-2-1983	Do.	Ligating clip with flanged base having a recessed engaging face.
157984	15-6-1983	Do.	Improved surgical instrument for suturing tissues and organs.
158239	15-2-1983	Do.	Ligating clip and applier instrument therefor with clip engaging escapement.
158303	15-3-1983	Do.	A Scissors type medical instrument for repeatedly applying a plurality of ligating clips across about tissue.
142633	10-3-1975	Flogates Limited Sandiron House, Beauchief, Sheffield, 572 RA, England.	Pouring of molten metals.
153043	18-2-1981	Do.	Reclaiming sliding gate valve components.
143657	20-11-1974	Do.	Improvements in or relating to the pouring of metals.
143658	10-1-1975	Do.	Improvements in or relating to the pouring of molten metals.
144719	30-1-1975	Do.	Improvements relating to sliding gate valve.
150675	16-1-1979	Do.	Method and apparatus for the making of a metal casting.
146388	7-3-1977	G.D. Societa Per Arioni, Via Pomponia, 10, Bologna, Italy.	Device for guiding and holding cigarette batches in apparatuses for transferring said batches from a conveyor up to a machine for packeting cigarettes into hinged-lid type packets.
148419	20-1-1978	General Electric Company, 1, River Road, Schenectady 5, New York, USA.	Temperature resistant machine tool component and method for making same.
153134	22-10-1980	Do.	Improved method of making diamond compact for rock drilling.
153537	27-12-1980	Do.	Continuous metal casting method, apparatus and products.
154864	21-4-1980	Do.	Bearing structure for large rotating shaft and in particular to self-aligning journal thrust bearing and bearing support.
155060	28-7-1981	Do.	In a power plant a system for controlling the operation of a steam turbine.
155502	3-4-1982	Hoechst Ag., 6230, Frankfurt/Main 80, West Germany.	Metering device.

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153557	24-12-1979	ICI Ltd., Imperial Chemical House, Mill Bank, London SW 1 P, England.	Method and apparatus for the manufacture of fuse cord.
153558	24-12-1979	Do.	Method and apparatus for helically spinning stranded reinforcing wrapping material on explosive fuse cord.
153559	24-12-1979	Do.	Method and apparatus for the manufacture of fuse cord.
154008	9-11-1979	Do.	Tubular cartridge case.
140747	20-3-1975	Johnson & Johnson, 501, George Street, New Brunswick, New Jersey, USA.	A blood filter unit.
140784	20-3-1975	Do.	Blood filtration unit.
141920	29-10-1974	Do.	Anti-fog surgical face mask with slits.
142385	15-10-1975	Do.	A surgical face mask.
143246	26-6-1976	Do.	Process for producing adhesive tapes from thermoplastic elastomeric materials.
145168	18-1-1977	Do.	A stabilized flavoured tooth cleaning article.
145944	21-6-1977	Do.	Reticular web.
146649	6-6-1977	Do.	A self supporting elastic and thermoplastic film and process for extruding the same.
146650	7-6-1977	Do.	A highly flexible and comfortable disposable absorbent dressing.
146826	9-8-1977	Do.	Pressure sensitive adhesive tape.
148709	21-10-1978	Do.	A water resistant orthopaedic bondage.
149758	19-2-1979	Do.	Layered absorbent structure.
149759	19-2-1979	Do.	A sanitary napkin disposable diaper and catamential tampon having a core of absorbent product.
150099	24-7-1978	Do.	Normally non tacky adhesive tape.
154121	15-7-1981	Do.	A method for forming a body fluid absorbent from peat moss and absorbent so prepared.
145059	11-5-1976	Kraftwerk Union AG., 4330 Mulheim (Ruhr), Wiesenstr., 35, F.R.G.	A steam generator for operation with pulverised coal and gas.
145711	11-5-1976	Do.	A steam generator for operation with coal firing.
146445	31-3-1978	Do.	Screening member for separating solids from gaseous media.
147753	2-8-1977	Do.	A shaft seal for a steam turbine with a divided outer housing and a shaft seal cover.
150116	7-6-1978	Do.	Damping arrangement for turbomachine rotors.
152037	15-4-1981	Do.	Desalination apparatus.
152441	13-5-1981	Do.	Hydraulic drive apparatus for turbine valves.
152594	1-2-1980	Do.	Apparatus for the gasification of coal.
152687	13-5-1981	Do.	Hydraulic drive apparatus for a turbine valve.
154908	19-6-1982	Do.	Double shell steam turbine housing.

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155429	21-4-1982	Kraftwerk Union AG., 4330 Mulheim (Ruhr), Wiesenstr. 35, F.R.G.	Hot gas system for driving generators.
157634	10-3-1983	Do.	A guide vaning of a turbo machine with an arrangement for damping vibration.
158404	1-10-1983	Do.	Steam turbine condenser having atleast one steam by-pass inlet.
152349	22-5-1980	Lothar Teske, Hegelstr 15, 5000 Köln 90, West Germany.	Arm-type feeder wheel for unloading solids from a storage bin.
152908	25-2-1980	Do.	A bunker clearance vehicle.
154840	26-4-1982	Do.	Device for discharging a round loose material silo.
156252	27-8-1982	Do.	Ash removal device for coal firing systems of steam generators.
143015	15-10-1975	Metallgesellschaft AG. 16 Frankfurt, A.M. Reuterweg 14, West Germany.	Improved combustion system for pellitizing apparatus of the travelling grate type.
143376	5-12-1975	Do.	A method for the production of heat by combustion of carbonaceous materials.
149966	20-8-1979	Do.	Sieving roller conveyor for green pellets.
152530	7-10-1980	Do.	Apparatus for regenerating absorbent.
163275	21-11-1980	Do.	Process of drying and calcining bulk material.
153712	26-11-1981	Do.	Rotary hearth furnace plant.
156560	27-9-1982	Do.	An apparatus for sealing a rotatable tubular member in a stationary housing.
157416	29-4-1983	Do.	Centrifugal mill having a horizontal cylindrical grinding drum.
143442	10-12-1975	Metallurgical Development, West Bay Street, Nassau, Bahamas.	A method of condensing zinc vapour.
144053	13-5-1975	Do.	A method of smelting zinc in a blastfurnace.
148170	27-7-1978	Do.	Improvements in or relating to tuyeres for blast furnaces and furnaces having such tuyeres installed therein.
148333	14-4-1977	Do.	Blast furnace charging apparatus.
151428	14-3-1979	Mitsubishi Heavy Industries Ltd., 5-1 Marunouchi-2-Chome-Chiyode-ku Tokyo, Japan.	A tire building machine and a method of building a radiatire using said machine.
151582	14-3-1979	Do.	A tire component servicer.
154807	12-1-1982	Mitsubishi Mining & Cement Co. Ltd., 5-1, Marunoushi, 2-Chome, Chiyodaku, Tokyo, Japan.	Cyclone separator.
149172	8-8-1978	Moteurs Leroy-Somer, Boulevard Marcellin Leroy, 16004, Angoulome, France.	Diffuser for hydro-electrical power plant and hydro-electrical power plant fitted with this diffuser.
142672	13-1-1975	Nitto Bosoki Co., Ltd., 1, Aze Higashi, Gonome, Fukushima-shi, Japan.	Method and apparatus for manufacturing glass fibres.
145616	4-8-1977	Do.	Method and apparatus for manufacturing glass fibres using defectable air curtain.
145993	4-8-1977	Do.	Method and apparatus for draw forming glass fibres.
154126	19-12-1981	Do.	Glass fibre forming unit.
150589	25-8-1978	Outokumpu oy Outokumpu, Finland.	A process for producing pellets of pre-determined size from a finely divided material and an apparatus for carrying out the process.

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143450	9-6-1975	Palitex Project-Company GmbH, Weesoweg 8, 415 Krefeld, West Germany.	A spinning or twisting spindle in particular a double-twisting spindle.
143884	5-8-1975	Do.	A double or two for one twisting spindle.
149028	7-10-1977	Do.	Two-for-one double twisting machine
149198	10-10-1977	Do.	Two-for-one twisting machine.
151203	18-1-1979	Do.	Apparatus for use with two for one twisting spindle for the taking and tension free release of a single pre-determined length of a thread or the like.
151736	10-7-1979	Do.	Two for one twisting spindle.
152211	11-4-1980	Do.	A thread brake.
152223	23-7-1979	Do.	A thread take-up assembly.
152267	27-7-1979	Do.	Device for the de-activation and re-activation of textile apparatus more especially a two-for-one spinning spindle.
153910	2-8-1980	Do.	Thread storage for a two-for-one twisting spindle or spinning spindle.
154484	10-12-1991	Do.	Carrier device for at least two twister or bobbin tubes.
154584	16-4-1981	Do.	Thread brake.
154894	5-6-1981	Do.	Apparatus for the controlled feeding and taking-off of a thread into or out of a thread treatment section.
155078	21-7-1981	Do.	Pull-off aid for drawing threads from atleast two bobbines.
155371	13-5-1982	Do.	Two-for-one twisting spindle.
156470	30-7-1982	Do.	A thread guide for drawing threads overhead from two yarn bobbins disposed coaxially one above the other.
156693	20-1-1982	Do.	Pneumatically threadable yarn brake and a two-for-one twisting spindle equipped therewith.
146786	24-5-1977	Pandrol Limited, 9 Holborn, London EC 1 N 2 NE, England.	A railway sleeper and a railway rail-and-fastening assembly employing it.
148584	28-1-1977	Do.	A device for removing rail clips from a railway rail and fastening assembly.
143784	18-3-1976	Paul Opprecht, 8962 Bergdietikon, Switzerland.	Method and apparatus for seam welding overlapped edges.
149471	17-5-1978	Do.	Transport installation for can bodies for a fully automated resistance welding machine.
144502	21-11-1977	Peico Electronics & Electricals Ltd., Shivsagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-400 018.	Hydraulically damped lifting mechanism for the pick-up arm of a record player.
143891	27-11-1975	Personal Products, Co., Milltown, New Jersey, U.S.A.	Absorbent product with reduced sloughing properties and a catamenial tampon using same.
144058	19-11-1975	Do.	Improved absorbent product with an absorbent core.
145028	21-1-1977	Do.	An absorbent products such as sanitary napkins and dispers.
145982	21-1-1977	Do.	A protective absorbent liner for nether garments.

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146794	21-1-1977	Personal Products-Co., Milltown, New Jersey, U.S.A.	Non-planar arcuate shaped absorbent liner such as sanitary napkins and panty shield.
147214	19-11-1975	Do.	A catamenial device.
148710	19-4-1979	Do.	Sanitary napkins.
149816	4-9-1978	Do.	A method of producing a soft comfortable catamenial tampon sealed in liquid impermeable container or envelope.
152324	21-9-1979	Do.	Thin catamenial absorbent product for adhesive attachment to wearer's garment.
157684	25-8-1980	Do.	An improved flexible absorbent board for absorbing body fluid based on cellulosic fibres.
155280	28-11-1981	PLM AB Djaknegaton #16, P.O. Box 836, S-201 86, Majmo, Sweden.	A method and device for producing a tubular object.
155404	28-11-1981	Do.	Bottle-like or jar-like container of thermo-plastic material and a method and device for moulding it.
150328	27-12-1979	Polysar Limited, Sarnia, Ontario, Canada.	Apparatus for the sampling and dilution of a sample from a fluid stream.
152429	27-12-1979	Do.	An apparatus for obtaining from a polymerization reactor a sample of polymer.
148098	1-9-1977	Rheinmetall GmbH, Dusseldorf, Ulmenstrasse 125, West Germany.	Cartridge casting for a propellant charge.
149588	8-3-1978	Do.	Protective surface coating composition for ammunition with combustible cartridge case or ammunition without cartridge case.
150889	1-9-1978	Do.	Sub-calibre arrow shaped missile having a drog stabilising bear part.
145587	26-2-1976	Saunders Valve Co., Ltd., Cwmbran, Gwent, NP 4 3XX, Wales.	Fluid flow control valves.
148394	25-1-1977	Do.	Method of forming an injection moulded functional lining on a valve body.
154438	4-7-1981	Seal Societe De Conditionnements En Aluminium, 47 Rue de Monceau-75008, Paris, France.	A method of manufacturing metallic strips by continuous casting between rolls.
157291	29-12-1981	Do.	Machine for manufacturing metallic strips or bands of aluminium or an aluminium alloy.
141428	2-7-1975	Shell Internationale Research Maatschappij B.V., Carel Van Bylandtlaan 30, The Hague, The Netherlands.	Apparatus for feeding finely divided solid fuel to a high pressure gasification chamber.
142509	1-10-1975	Do.	Improvement relating to high pressure gasification.
143291	13-5-1975	Do.	Apparatus for the gasification of finely divided fuels.
152816	22-11-1979	Do.	Apparatus for injecting particulate polymer into a pipeline hydrocarbons.
153671	21-1-1981	Do.	Exothermic reactor for use in the preparation of hydrocarbons from a mixture of hydrogen and carbon monoxide.
155455	16-9-1981	Do.	Apparatus for separating liquid gas mixture.
155911	7-4-1977	Do.	Riser with hood.
148257	14-10-1977	Showa Denko K.K., 13-9-Shiba Daimon 1-Chome, Minato-Ku, Tokyo, Japan.	Method for manufacture of water-blast high carbon ferrochromium shot.

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146637	20-12-1976	Siemens AG., Berlin & Munich, West Germany.	Actuators for operating control devices.
149581	9-11-1978	Do.	Axial fan.
145354	10-3-1976	Single Buoy Moorings Inc., Fribourg, 12 Rue Abbebovet, Switzerland.	Floating structure.
145830	21-5-1976	Do.	Single-point mooring buoy.
150709	14-5-1979	Societe Dite : A.C.M.A.T. Ateliers De Constructions Mechaniques De L'Atlantique, of Le Point du Jour 44600 Saint Nazaire, France.	Air-transportable highly autonomous cross-country medic vehicle.
151075	14-5-1979	Do.	Transfer box for a motor vehicle.
151682	13-9-1979	Do.	Automobile vehicle having a chasis integral with a cab.
152729	8-2-1980	Stamicarbon B.V. P.O. Box 10, Geleen, The Netherlands.	Process for making polymer filaments of high tensile strength and modulus.
154059	30-3-1981	Do.	Device for the spraying of a liquid by means of a gas.
154542	2-2-1981	Sumitomo Electric Industries Ltd., No. 15, Kitahama, 5-chome, Higashi-Ku, Osaka-Shi, Osaka, Japan.	Rubber and plastic covered cable cross-linking device.
147587	11-5-1977	Tesa S.A., Rue Bugnon 38, 1020 Renens, Switzerland.	Adjustable fork gauge.
149302	23-6-1977	Do.	Micrometer had for internal measurement instrument.
144919	22-9-1976	Texaco Development Corporation, 135 East, 42nd Street, New York, New York 10017, U.S.A.	A process and an apparatus for continuously separating by gravity of particulate carbon-liquid organic extra dispersion.
156852	1-2-1982	Texaco Development Corporation, 135 East 42nd Street, New York, New York, 10017, U.S.A.	A heat exchanger for cooling synthetic gas.
152870	5-11-1979	The Jacobs Manufacturing Co., Bloom-field, Country of Hartford, Connecticut 06002, U.S.A.	Engine braking system of a gas compression relief type.
153450	1-12-1980	Do.	Engine braking apparatus of the gas compression release type.
146790	18-8-1977	The Tata Iron & Steel Co., Ltd., Jamshedpur Bihar, India.	Cold roller transversely reinforcement bars.
151737	3-8-1979	United Technologies, 1, Financial Plaza, Hartford, Connecticut 06101, England.	A control system for a wind turbine having a wind driven rotor.
153214	2-3-1981	Do.	Wind turbine blade pitch control system.
153477	6-4-1981	Do.	Wind turbine including drive train.
154454	7-12-1979	Do.	Method for fabricating wind turbine blades.
154485	22-12-1981	Do.	Blade pitch angle control device for a wind turbine generator.
154615	14-10-1981	Do.	Improvements in or relating to a method of manufacturing a filament-round article.
154875	11-5-1981	Do.	Wind turbine having a hub or rotor with a plurality of air-foil blades mounted thereon.
156497	20-7-1982	Do.	A method and apparatus for manufacturing articles such as for example article of air-foil cross-sectional shape by filament winding.
156973	19-10-1982	Do.	A method of forming a tapered filament wound article.

RENEWAL FEES PAID

143764	144146	144223	144282	144372	144653	144968
145477	145955	146088	146108	146436	146476	146507
146518	146613	146869	146936	146964	146976	147039
147113	147233	147243	147300	147380	147446	147448
147600	147938	147951	148025	148287	148521	148663
148752	148979	149280	149315	149352	149615	149850
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REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

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- Class 1. No. 159399. Bajaj Auto Limited, of Akurdi Pune 411 035, Maharashtra, India, an Indian Company. "Motor Cycle with deals". 16th February, 1988.
- Class 1. No. 159402. Gargo Private Corporation, Bhuteshwar Road, Mathura. (U.P.) India, An Indian Partnership Firm. "Embryo transfer cum Artificial Insemination Chute". 17th February, 1988.

Class 1. No. 159591. Electronic Enterprises, 39, New Okhla Industrial Complex, Okhla Phase-1, New Delhi-110020, India. (a sole proprietary concern) Indian. "Automatic Voltage Stabilizer". 12th April, 1988.

Class 1. No. 159664. Sat Parkash Gupta, HM 333, Housing Board Colony, Jamalpur, Ludhiana, Punjab State, Indian National. "Clamping Thimble connector". 12th April, 1988.

Class 1. Nos. 159665 & 159666. Bharat Industries, Sardar V. P. Road, Janta Garden Chowk, Rajkot-360002, Gujarat State, Indian Partnership firm. "Knife". 3rd May, 1988.

Class 1. No. 159673. Rallis India Limited, a Company incorporated under the Companies Act, having its place of business at Ralli House, 21 D, Sukhadwala Marg, Fort, Bombay-400 001, in the State of Maharashtra within the Union of India. "Table Fan shield". 5th May, 1988.

Class 1. No. 159686. Ganga Narayan Ghosh, Indian National carrying on business at 6, Sheetal Palace, 1st Road, T.P.S. IV, Bandra (West), Bombay-400 050, State of Maharashtra, India. "Multi-advantageous Mega Refuse Bins". 10th May, 1988.

Class 1. No. 159697. Chinat Trust through its trustee, N. R. Dongre, C-37-Connaught Place, New Delhi-110001, India. An Indian Trust. "Snack and Sandwich Toaster". 16th May, 1988.

Class 1. No. 159723. Tarun Shantilal Dholia, Indian National of Jayesh Enterprises, 12-H Goregaonkar Marg, Gamdevi, Bombay-400 007, State of Maharashtra, India. "Cutless Rubber Bushes". 20th May, 1988.

Class 1. No. 159880. Rathindra Narayan Dey, an Indian and sole proprietor of Sarada Industries of 36, Strand Road, 1st Floor, Calcutta-700 001, West Bengal, India. "Paddy Thresher". 28th June, 1988.

Class 3. No. 159222. Femina Pen Industries, 2/1, Nanda Ram Sen 1st Lane, Calcutta-5, West Bengal, India. An Indian Proprietary firm. "Ball Pen". 30th December, 1987.

Class 3. No. 159425. Gold Coin Plastics, Podar Bhavan, Parekh Lane, Kandivali (West), Bombay-400067, State of Maharashtra, India, an Indian Partnership firm. "Casserole". 25th February, 1988.

Class 3. No. 159599. Caroma Industries Limited, a company incorporated under the laws of the State New South Wales, Australia of 31 Market Street, Brisbane, Queens Land 4000 Australia. "A Toilet Seat and Lid". Reciprocity date is 16th October, 1987. (Australia).

Class 3. No. 159672. Orson Electronics Limited, a Company incorporated under the Companies Act, having its registered office at 209/210 Arcadia, Nariman Point, Bombay-400 021, in the State of Maharashtra within the Union of India. "TV set". 5th May, 1988.

Class 3. No. 159682. M/s. Parasales (India) Regd., B-24/2 Wazirpur Industrial Area, Delhi-52 (India) an Indian Partnership firm. "Lunch Box". 10th May, 1988.

Class 3. No. 159718. M/s. Parasales (India) Regd., B-24/2 Wazirpur Industrial Area, Delhi-52 (India) an Indian Partnership firm. "Pencil Box". 20th May, 1988.

Class 3. No. 159752. Top In India, Plastics, 60 Thacker Industrial Estate, 3rd Floor, Near Sitaram Mills, N. M. Joshi Marg, City of Bombay-400 011, State of Maharashtra, India, an Indian Proprietary firm. "Toy Sword". 27th May, 1988.

Class 3. No. 159753. Top in India, Plastics, 60 Thacker Industrial Estate, 3rd Floor, Near Sitaram Mills, N. M. Joshi Marg, City of Bombay-400 001, State of Maharashtra, India, an Indian Proprietary firm. "Toy Mace". 27th May, 1988.

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Class 3. No. 159784. Paramount Industrial Corporation, B-24/2 Wazirpur Industrial Area, Delhi-110 052, India, an Indian Partnership firm. "Lunch Box". 9th June, 1988.

Class 3. No. 159785. Paramount Industrial Corporation, B-24/2 Wazirpur Industrial Area, Delhi-52, India an Indian Partnership firm. "Pencil Box". 9th June, 1988.

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Class 3. Nos. 159801 & 159802. Jalan Pen Industries, 86, Biplabi Rash Behari Bose Road, Rampuria Market, Calcutta-700001, West Bengal, India, an Indian Company. "Ball Point Pen". 14th June, 1988.

Class 3. No. 159831. MRF Ltd., 826, Anna Salai, Madras-600002, Tamil Nadu, India. "Ring Tread System". 16th June, 1988.

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Class 4. No. 159684. Ganga Narayan Ghosh, Indian National carrying on business at 6, Sheetal Palace, 1st Road, T.P.S. IV, Bandra (West), Bombay-400 050, State of Maharashtra, India. "Refuse Cubical". 10th May, 1988.

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Class 12. No. 159689. Mrs. Hemkunvar G. Maroo, of 12-A, K. K. Gupta Industrial Estate, Bombay-400 080, Maharashtra, India, Indians. "Domestic flour Mill". 11th May, 1988.

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Institut Khimii I Tekhnologii Bedkikh Elementov I Mineralnogo Syrya Kolskogo Piliala Akademii Nauk SSSR.—151791.
Institut Khimii Uralskogo Nauchnogo Tsentra Akademii Nauk SSSR.—152362.
Institut Matematiki I Mekhaniki Akademii Nauk Azerbaidzhanskoi SSR.—151687.
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Kabelmetal Electric GmbH.—152035.
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 Kamarudin, M. A. W.—151828.
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 Karlstads Handles-Och Konsult A. B.—152011.
 Karykion, Inc.—151060.
 Kashirsky, A. G.—151989.
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 Kitamura, S.—152184.
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 Maag Gear Wheel & Machine Co. Ltd.—151820.
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 Magnesium Elektron Ltd.—152252.
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 Majumder, P. K.—152005.
 Makarov, S. M.—151541.
 Malhotra, S.—152300.
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 Mandani, H. S.—151413.
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 Marathe, R. B.—151976.
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 Marco Marraccini of Viareggio (Lucca).—151943.
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 Nauchno-Issledovvody Akademii Kommunalnogo Khozyaistva
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 Nauchno-Issledovatel'sky Institut Metllurgii.—151142.
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 Proizvodstvennoe Geologiceskoe Obiedinenie Severo-Zafad-
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 Ramalingam, N. P. K.—151936.
 Ram, K. S.—151333.
 Ranade, S. B.—151016.
 Rashinkar, N. V. (Mrs.).—152018.
 Rathi, S. R.—151832.
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 Reed, K. J.—151834.
 Research Analysis & Development Inc.—151971.
 Rheinmetal GMBH.—150889.
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 Rubens, H. A.—151148.
 Ruhrohemis Aktiengesellschaft.—151655, 152244.
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 Sane, R. B. (Mrs.).—151163.
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 Shah, N. P. (Smt.).—151830.
 Sharmugham, K. N. C.—150868.
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 Shikunova, L. A.—151807.
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 Shishoo, C. J.—151496.
 Shodan, C. C.—151569.
 Shodan, K. C.—151569.
 Shodan, M. C.—151569.
 Shodan, V. C.—151569.
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 Shroff, M. C. (Dr.).—151865.
 Sidhardhan, G.—151704.
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 Simonhartely Ltd.—151080.
 Simonov, S. M.—151514.
 Singh, H.—151299.
 Singh, K.—151968.
 Singh, L.—151626.
 Singh, M.—151343.
 Singh, V.—151097, 151104, 151620, 151621, 151689, 151699.
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 Siren, M. J.—151337.
 Sistemco N. V.—151194.
 Sivachenko, E. W.—150860.
 Sivash, V. G.—151807.
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 Snam Abresives Pvt. Ltd.—151489.
 Snemprogetti S. P. A.—150930, 151018, 151368, 151533, 151534.
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 Spandl, A. N.—152216, 152217, 152218, 152291.
 Spence, W. G.—151171.
 Spindelfabrik Sussen, Schurr, Stahlecher & Grell GmbH.—151714.
 Sobol, M. M.—151807.
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<i>S—contd.</i>	<i>S—contd.</i>
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Societa Italiana Telecomunicazioni Siemens S.p.a.—152230.	Superba S. A.—151470.
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Societe De Conseils De Recherches Et D'Applications Scientifiques.—151146.	Swaminathan, S. (Mrs.).—151937.
Societe De Paris Et Du Phone.—152107, 152287, 151214, 151444, 151678.	Swiss Aluminium Ltd.—151301, 151536, 151586, 151740, 151768.
Societe Des Electrodes ET Refractaries Savoie (SERS).—151193.	Synthelabo.—151103.
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Societe De Vente De L'aluminium Pechiney.—151340.	Tata Engineering & Locomotive Co., Ltd.—151504, 151505, 151664.
Societe Dite, A. C. M. A. T. Ateliers De Constructions, Mecaniques De L'atlantique.—151075, 151837, 151838, 152021.	Tata Hydro-Electric Power Supply Co., Ltd., The.—150847.
Societe Dite : A.C.M.A.T.S.A.—151682.	Tata Iron and Steel Co., Ltd., The.—151431, 151681.
Societe Lab.—151733.	Tata Power Company Limited, The.—150847.
Societe Nationale Elf Aquitaine (Production).—151982.	Tata-Robins-Fraser Ltd.—151788.
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Societe Technique Pour L' Industrie Nouvelle S.A.—151478.	Techno Engineering Industries.—150971.
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Sopro Products, Inc.—151953.	Teplitsky, Y. S.—151514.
Southern Roadways Ltd.—151635.	Territorialnoe Geologicheskoe Upravlenie Teentralnykh Raionov.—151290, 151529.
Sredneazitsk Nauchno-Issledo-vatelevy Institut Prirodno-gogaza.—151282, 151527, 152027, 152030, 152176.	Teske, L.—152349.
Sreenivasan, N.—130852.	Texaco Development Corpn.—150994, 151207, 151279, 151458, 151822, 151888.
Sridhar, P. (Mrs.).—151183, 151636.	Tex Innovation AB.—151920.
Stamcarbon B. V.—151102, 151154, 151516, 151649, 151692, 151776, 152254.	Thaikattil, J. (Dr.).—152073.
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Standard Car Trunk Co.—151129, 151763.	Tieloku Chemical Industry Company Ltd.—151297.
Standard Oil Co., The.—151108.	Tiple Pa Trust.—151162.
Star Industrial & Textile Enterprises Ltd.—151161, 151221, 151831.	Tkechenko, A. V.—151541.
Stark V.—150986.	Tomenko, V. M.—150961.
Stauffer Chemical Co.—151179, 151266, 151433, 151511, 151567, 151578, 151825, 152175.	Tower Scaffolding (Bristol) Ltd.—151890.
Steelworth Ltd.—151779.	Tox-Dubel Werk Richard W. Heckhausen KG.—151823.
Stopino Aktiengesellschaft.—150940, 151010, 151295, 152124, 152260.	Tovama Chemical Co., Ltd.—151264, 151281, 151439, 151442.
Stork Brabant B. V.—152225.	Toyo Engineering Corpn.—151098, 151159, 151544, 151545, 151860, 151914, 151962, 152112.
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Subramanian, S. P.—152245.	Triplex Safety Glass Co. Ltd.—152110.
Subramaniam, J. P.—151872.	Trivedi V. M.—151123.
Sukhanov, L. A.—151590.	Trofimov, D. N.—151989.
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Sulzer Brothers Ltd.—151672.	Trutzschler GmbH & Co., KG.—151140, 151396, 152095.
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Sumitomo Chemical Co., Ltd.—151486, 151676, 151815, 152116, 152193.	Tullis Russel & Co., Ltd.—151847.
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Name & Appln. No.	Name & Appln. No.
—U—	S.—contd.
<p>UCB S. A.—151294. UOP Inc.—151932. USM Corp.—151081. USS Engineers & Consultants Inc.—151187, 151700, 152237. USV Pharmaceutical Corp.—151285, 152326. Uhde GmbH.—151269. Ukrainsky Nauchno-Issledovatel'sky Institut Mekhanizatsii Elektrifikatsii Selskogo Khozyaistva.—151892, 151519, 152159. Unicorn Industries Ltd.—151139. Uni-Distributors Pvt Ltd.—152249. Unis Van Kunstmeestfabrieken B. V.—152174. Union Carbide Corporation.—150904, 151070, 151071, 151073, 151100, 151189, 152067, 152087, 152088, 152141, 152145, 152153, 152253, 152304, 152316. Union Carbide India Limited.—150968, 151308, 151349, 151350, 151999, 152059. Unisystems Pvt. Ltd.—151274. United States Borax and Chemical Corporation.—151426, 152274. United Technologies Corporation.—151726, 151737, 151958. Universal Luggage Mfg. Company Private Ltd.—151623. University of Manchester Institute of Science and Technology, The.—151080. Upjohn Company, The.—152344. Usha Automobile & Engineering Ltd.—151994. Usha Ismal Ltd. (formerly known as Indian Splicing (Mechanical) & Accessories Ltd.)—150933, 151994, 152063.</p>	<p>Volkov, S. N.—151541. Vorhauer Laboratories Ltd.—151925. Vsesjuzny Nauchno-Issledovatel'sky Institut Metallurgicheskoi Teplotekhniki.—150901. Vsesojuzny Nauchno-Issledovatel'sky Institut Po Stroitel'stvu Magistralnykh Truboprovodov.—151028. Vsesojuzny Nauchno-Issledovatel'sky Institut Tekhnich-Eskogoutgleroda.—150988, 151430. Vsesojuzny Nauchno-Issledovatel'sky I Proektno-Konstruk-Torsky Institut atomonogo Energeticheskogo Mashinostroyeniya.—152123. Vsesojuzny Nauchno-Issledovatel'sky I Proektno-Konstruk-Torsky Institut Pooborudovaniyu Dlya Konditsionirovaniya Vozdukh I Ventilyatsii.—151878. Vsesojuzny Nauchno-Issledovatel'sky I Proektny Institut Aljuminievoi.—151720. Vostochny Nauchno-Issledovatel'sky I Proektny Institut Ogne-upornoj Promyshlennosti.—150884. Vsesojuzny Nauchno-Issledovatel'sky I Proektny Institut Po Ochistke Tekhnologicheskikh Gazov Stoknykh Vod I Ispolzovaniyu Vtorichnykh Energoresursov Predpriyatiya Chernoi Metallurgii "Vnippichmetenergoochistka".—151293. Vyzkumny Ustav Ravnarsky.—151397.</p>
—V—	—W—
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	<p>Xhonneux, G. M. J.—152070. Y Yamato Iron Works Co., Ltd.—151811. Yokogawa Electric Works Ltd.—151734. You, A. C.—152039.</p>

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CLASS : 163431

Int. Cl. : C 10 m 105/00.

ADDITIVE COMPOSITIONS CONTAINING AMINO-PHENOL COMBINATIONS USEFUL AS LUBRICANT AND FUEL ADDITIVES.

Applicant : THE LUBRIZOL CORPORATION, 29400 LAKELAND BOULEVARD, WICKLIFFE, OHIO 44092 U.S.A.

Inventor : ZENOWLF MICHAEL HOLUBEC.

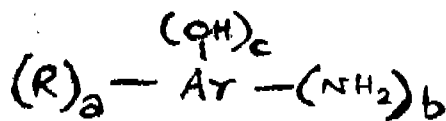
Application No. 246/Cal/83 filed February 28, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

32 Claims

A nitrogen-containing organic additive in the form of composition comprising a combination of first and second components :

the first component being at least one amino phenol of the general formula (1) of the accompanying drawings



Formula I

wherein R is a substantially saturated, hydrocarbon-based substituent of at least 8 aliphatic carbon atoms; a, b and c are each independently an integer of one up to three; times the number of aromatic nuclei present in Ar with the proviso that the sum of a, b and c does not exceed the unsatisfied valences of Ar; and R is an aromatic moiety having 0—3 optional substituents selected from the group consisting of lower alkyl, lower alkoxy, nitro, halo or combinations of two or more of said substituents;

and the second component selected from one or more carboxylic derivative compositions produced by reacting at least one substituted succinic acylating agent with a reactant selected from the group consisting of (a) an amine characterized by the presence within its structure of at least one H-N group, (b) an alcohol, (c) a reactive metal or reactive metal compound such as herein described and (d) a combination of two or more of any of (a) through (c), the components of (d) being reacted with said one or more substituted succinic acylating agents simultaneously or sequentially in any order, wherein said substituted succinic acylating agents consist of substituent groups and succinic groups wherein the substituent groups are derived from polyalkene, said polyalkene being characterized by a Mn value of 1200 to 5000 and a Mw/Mn value of 1.5 to 6, said acylating agents being characterized by the presence within their structure of an average of at least 1.3 succinic groups for each equivalent weight of substituent groups.

Compl. specn. 108 pages.

Drgs. 3 sheets

CLASS :

163432

Int. Cl. : C 10I 3/00.

APPARATUS AND METHOD FOR PRODUCING FUEL GAS FROM ORGANIC MATERIAL CAPABLE OF SELF-SUSTAINING OPERATION.

Applicant : PYRENCO, INC., P. O. BOX 903, PROS-SER, WASHINGTON 99350, U. S. A.

Inventors : 1. DONALD E. CHITTICK, 2. WAYNE A. FETTERS.

Application No. 385/Cal/83 filed March 31, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

22 Claims

A continuous process for producing fuel gas from biomass input material such as herein described the process being substantially self-sustaining so that it does not require the addition of external heat following initiation of the process, comprising :

establishing and maintaining a multi-layer fuel gas production bed in a reaction chamber, the production bed comprising in sequence an upper layer of a head of substantially unreacted biomass input material, an intermediate layer of a thin pyrolysis reaction zone for reduction of the input material, the pyrolysis reaction zone being at a temperature within the range of 800°C—1000°C, and a lower layer of a hot charcoal bed of devolatilized char, the charcoal bed being at a temperature sufficiently high to reduce any tars from the pyrolysis zone to carbon monoxide and hydrogen; wherein the input material is relatively uniform in size and relatively small, compared to the cross-sectional area of the reaction chamber, wherein the pyrolysis reaction zone has a substantially uniform temperature profile over the cross-sectional area thereof and there is substantially uniform combustion over the cross-sectional area thereof, and wherein the hot charcoal bed comprises an initial charge of devolatilized char and any devolatilized char resulting from the reduction of the input material in the pyrolysis zone during operation of the process;

wherein the step of establishing and maintaining the fuel gas production bed comprises the step of adding biomass input material periodically to the head of biomass input material and the step of moving oxygen-containing gas downwardly through the production bed, with a substantially uniform air flow and pressure over the cross-sectional area of the pyrolysis zone; and wherein moisture is added to the charcoal bed in the reaction chamber through openings in the reaction chamber around the periphery thereof.

Compl. Specn. 45 pages.

Drgs. 5 sheets.

CLASS : 32-B.

163433

Int. Cl. : C 07 d 1/00, 23/00.

A PROCESS FOR THE PREPARATION OF AN AROMATIC OR HETEROCYCLIC OXAZEPINE OR THIAZEPINE.

Applicant : A. H. ROBINS COMPANY, INCORPORATED, OF 1407 CUMMINGS DRIVE, RICHMOND, VIRGINIA 23220, UNITED STATES OF AMERICA.

Inventor : ALBERT DUNCAN CALE, JR.

Application No. 1181/Cal/83 filed September 27, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

A process for the preparation of an aromatic or heterocyclic oxazepine or thiazepine of the formula I as shown in accompanying drawings, wherein A represents an aromatic ring having two of its carbon atoms held mutually with the oxazepine or thiazepine moiety selected from the group consisting of benzene, naphthalene or a pyridine in any of its four positions, any of the rings optionally substituted by one or two Y radicals selected from the group consisting of halo, loweralkyl, loweralkoxy, nitro or trifluoromethyl; B & E are selected from oxygen or sulfur and may be the same or different;

R is selected from the group consisting of hydrogen, loweralkyl, cycloalkyl, or phenyl-loweralkyl of which phenyl may be optionally substituted by one or two radicals selected from halo, loweralkyl, loweralkoxy, nitro or trifluoromethyl;

n is 1, 2 or 3,

Z is selected from the group consisting of $-NR^1R^2$, 1H-pyrazol-1-yl or 1H-imidazol-1-yl, R^1 R^2 are selected from the group consisting of hydrogen, loweralkyl, cycloalkyl and phenyl-loweralkyl of which phenyl is optionally substituted by 1 or 2 radicals selected from halo, loweralkyl, loweralkoxy, nitro, trifluoromethyl or cyano or R^1 and R^2 taken together with the adjacent nitrogen atom may form a heterocyclic residue selected from the group consisting of 1-pyrrolidinyl, 1-piperidinyl, 4-substituted piperidine-1-yl, 4-morpholinyl, 1-piperazinyl, 4-substituted piperazin-1-yl, and 1, 2, 3, 6-tetrahydropyridin-1-yl and the pharmaceutically acceptable salts thereof with the proviso that when R is hydrogen, Z is never a primary or secondary amine and a further proviso that when n=3, Z is not 1H-pyrazol-1-yl, 1H-indol-1-yl, 2, 5-dimethylpyrrolidin-1-yl, 2-methylpyrrolidin-1-yl or 1, 2, 3, 6-tetrahydropyridin-1-yl which comprises the steps of

Step (1) halogenating a compound of the formula IV b as shown in the drawings wherein A represents an aromatic ring selected from benzene, naphthalene or a pyridine in any of its four positions any of the rings optionally substituted by one or two Y-radicals selected from halo, loweralkyl, loweralkoxy, nitro or trifluoromethyl;

E is oxygen or sulfur

R is selected from the group consisting of loweralkyl, cycloalkyl or phenyl-loweralkyl of which phenyl may be optionally substituted by one or two radicals selected from halo, loweralkyl, loweralkoxy, nitro trifluoromethyl.

R^2 is hydrogen or an acid neutralizing ion and n is one or two, to give a compound of the formula III as shown in the drawings, or its free base wherein X is chlorine or bromine and A, E, R, Y and n are the same as the starting values,

Step (2) fusing a compound prepared in step 1 to give a compound of the formula IIa as shown in the drawings, wherein A, E, R, n, X and Y are as defined in step 1 and A now has two of its carbon atoms held mutually with the oxazepine or thiazepine moiety,

Step (3) optionally reacting a compound prepared in step 2 with a sulfurizing agent to obtain an azepinethione of the formula II b as shown in the drawings, wherein A, E, R, X and Y are defined in step 2,

Step (4) when required, reacting a compound prepared in step 2 with an alkali-metal cyanide to obtain a compound of the formula IIc as shown in the drawings, wherein A, E, Y and R are as defined in step 2,

Step (5) reacting a halogen compound prepared in step 2 or 3 with a compound of the formula

ZII

wherein Z is selected from $-NR^1R^2$, 1H-pyrazol-1-yl, or 1H-imidazol-1-yl and wherein R^1 and R^2 are selected from hydrogen, loweralkyl, cycloalkyl and phenyl-loweralkyl of which phenyl may be optionally substituted with 1 or 2 radicals selected from halo, loweralkyl, loweralkoxy, nitro, trifluoromethyl or cyano or R^1 and R^2 taken together with the adjacent nitrogen atoms may form a heterocyclic residue selected from the group consisting of 1-pyrrolidinyl, 2, 5-dimethylpyrrolidin-1-yl, 2-methylpyrrolidin-1-yl, 1-piperidinyl, 4-substituted piperidin-1-yl, 4-morpholinyl, 1-piperazinyl, 4-substituted piperazin-1-yl and 1, 2, 3, 6-tetrahydropyridin-1-yl to give a compound of the formula Ia as shown in the drawings, wherein A, E, R, n and Y are as defined above in step 2, Z is the same as in the ZII compound and B is an oxygen or sulfur atom.

Step (6) optionally reacting a compound prepared in step (5) wherein B is an oxygen with a sulfurizing agent to obtain a compound of the formula Ib as shown in the drawings, wherein A, E, R, n, and Z are as defined in step 5,

Step (7) reducing a cyano compound as prepared in step 4 to a primary amine of the formula Ic-Ia as shown in the drawings, wherein A, E, Y and R are the same as in steps 2 and 4,

Step (8) when required reacting a primary amine prepared in step 5 or 7 of the formula Ic-I as shown in the drawings, wherein A, E, Y and R are as defined in step 2 with one of the following reactants or sets of reactants,

- formaldehyde and formic acid to give a tertiary dimethylamine,
- a dihalide to give a heterocyclic amine,
- a dialdehyde and sodium cyanoborohydride to give a heterocyclic amine,
- equal molar amounts of an aldehyde or ketone and sodium cyanoborohydride with large excess of above primary amine to give a secondary amine,
- equal molar amounts of the primary amine and sodium cyanoborohydride with at least two equivalents of aldehyde or ketone to give a tertiary amine,
- in sequence : trifluoroacetyl chloride, alkyl or phenylalkyl halide, potassium hydride and potassium hydroxide to give a secondary amine

all products being encompassed by the formula Id as shown in the drawings, wherein A, E, Y are as defined in step 2 and Z is $-NR^1R^2$ wherein R^1 and R^2 are loweralkyl, cycloalkyl and phenyl-loweralkyl, the phenyl of which may be optionally substituted by halo, loweralkyl, loweralkoxy, nitro, trifluoromethyl or cyano and R^1 and R^2 taken together with the adjacent nitrogen may form a heterocyclic residue selected from 1-pyrrolidinyl, 1-piperidinyl, 4-substituted piperidin-1-yl, 4-morpholinyl, 1-piperazin-1-yl or 1, 2, 3, 6-tetrahydropyridin-1-yl and sulfurizing the azepinone or thiazepinone to give a corresponding thione,,

Step (9) when required, reacting a benzyl or substituted benzyl compound where Z is a tertiary amine obtained in steps 5, 6 or 8 of the formula Ic as shown in the drawings, wherein A, E and Y are as defined in step 2 and Z is any radical under the definition of Z in Formula I subject to the same provisos given thereunder, Z never being a primary or secondary amine, with sodium and ammonia to give a

compound of the formula If as shown in the drawings, wherein A, E and Y are as defined above in step 2, ($n=1$ to 3) and Z is the same as the starting compound in this step.

Step (10) optionally reacting the free base of any compound prepared in steps 5 to 9 with a pharmaceutically acceptable acid or quaternary forming halide or sulfate to form a pharmaceutically acceptable salt thereof.

Compl. specn. 114 pages.

Drgs. 7 sheets

CLASS : 168-C.

163434

Int. Cl. : G 06 k 13/00.

APPARATUS FOR PRODUCING INTEGRATED GRAPHIC DISPLAY ON A VISUAL DISPLAY DEVICE REPRESENTATIVE OF THE SAFETY STATUS OF A COMPLEX PROCESS PLANT.

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventors : 1. WILLIAM FRANK SCHASFER, 2. JAMES LUKE LITTLE, 3. KENNETH FRANCIS COOPER, 4. JAMES R. EASTER.

Application No. 185/Cal/84 filed March 14, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

An apparatus for producing integrated graphic display on a visual display device representative of the safety status of a complex process plant, the apparatus comprising :

means for generating status signals representative of the value of the selected operating parameters measured on a real time basis,

means for generating target basis reference signals for each of said operating parameters for current operating levels,

means for normalizing each status signal to its associated reference signal to have a magnitude proportional to preselected magnitude, characterised by

means for generating a from said normalised status signals a display on the visual display device which emanates from a common origin with respective sectors of said display each being defined by the magnitude of at least one normalised status signal in such a manner that with all of the displayed operating parameters measured at the target values, all of the respective sectors of the display will exhibit an equal relationship to said origin.

Compl. specn. 33 pages.

Drgs. 9 sheets

CLASS : 98-I.

163435

Int. Cl. : F 24 j 3/02.

SPONTANEOUS CONNECTION TYPE SOLAR HEAT COLLECTOR.

Applicant : NITRO KOHKI CO., LTD., OF 9-4 NAKAI-KEGAMI 2-CIHOME, OHTA-KU, TOKYO, JAPAN.

Inventors : 1. HIROSATO TAKEUCHI, 2. TOSHIO MIKIYA.

Application No. 426/Cal/84 filed June 19, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

A spontaneous convection type solar heat collector comprising :

a reservoir in which a fluid is disposed, said reservoir including an upper portion, a lower portion and an inner surface;

at least one double-tubing type solar heat collecting tube having an open end and a closed end;

at least one connecting opening being provided in the lower portion of said reservoir for mounting the open end of said double-tubing type solar heat collecting tube;

insulating means being operatively positioned around said reservoir for protecting and insulating said reservoir;

said open end of said double-tubing type solar heat collecting tube being positioned in a fixed fluid-tight manner to said connecting opening and being flush with the inner surface of said reservoir for increasing the area of fluid circulation within said reservoir.

Compl. specn. 9 pages.

Drgs. 2 sheets

CLASS : 39-A & 40-H.

163436

Int. Cl. : C 01 b 17/16, 17/36.

PROCESS FOR SELECTIVELY REMOVING HYDROGEN SULFIDE FROM GAS MIXTURE.

Applicant : NL INDUSTRIES, INC. OF 1230 AVENUE OF THE AMERICAS NEW YORK, NEW YORK 10020, UNITED STATES OF AMERICA.

Inventors : 1. KRISHAN BHATTA, EDWARD E. BURNES.

Application No. 777/Cal/84 filed November 12, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

A process for selectively removing hydrogen sulfide from a gas mixture comprising treating a gas mixture comprising natural gas, hydrogen sulfide and carbon dioxide with an aqueous medium containing sodium nitrite, said aqueous medium being buffered to a pH of greater than 5.5.

Compl. specn. 29 pages.

Drg. Nil

CLASS : 32-F₁.

163437

Int. Cl. : C 07 c 39/24.

A PROCESS FOR THE PREPARATION OF 2-HALOGENORESORCINOL.

Applicant : FIDIA S.p.A., OF VIA PONTE DELLA FABBRICA 3/A. 35031 ABANO TERME, ITALY.

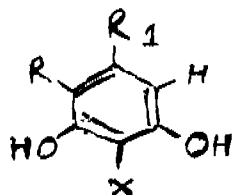
Inventors : 1. FRANCESCO DELLA VALLE, 2. AURELIO ROMEO.

Application No. 863/Cal/84 filed December 11, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

10 Claims

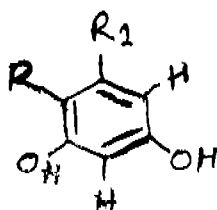
A process for the preparation of a 2-halogenoresorcinol of the formula I of the accompanying drawings,



Formula I

wherein X represents a halogen atom and R and R₁, which may be the same or different, represent a hydrogen or halogen atom, or R and R₁ individually or together represent a substituted or unsubstituted hydrocarbon group or a substituted or unsubstituted hydroxyl, carboxylic, amino, cyano or amino group, and ethers or esters of said hydroxyl, carboxylic and amino groups, or a salt thereof, the process comprising :

- (a) sulfonating resorcinol or a derivative thereof of the formula II, wherein R and R₁ are as defined above for formula I to produce a sulfonation product;



Formula II

- (b) halogenating the said sulfonation product to give a halogenation product, and
 (c) protodesulfonating the said halogenation product with an aqueous acid at a temperature of room temperature to about 150°C.,
 (d) the ethers or esters being optionally prepared in a known manner by converting either or both of the groups R and R₁ when these are hydroxyl groups by
 (i) using an esterifying agent such as a lower aliphatic alcohol having 1 to 7 carbon atoms or benzyl or phenylethyl alcohol or
 (ii) using an organic acid having 1 to 15 carbon atoms.

Compl. specn. 31 pages.

Drg. 1 sheet

CLASS : 58-B.

163438

Int. Cl. : E 06 b 5/00.

PRE-FABRICATED R. C. C. FRAMES FOR DOOR, WINDOW OR COMBINATION THEREOF, AND A METHOD OF MANUFACTURING SUCH FRAMES.

Applicant & Inventor : NRIPENDRA NATH BHATTACHARYA, OF C-20X, SAGARBHANGA HOUSING ESTATE, DURGAPUR-713 211, WEST BENGAL, INDIA.

Application No. 338/Cal/85 filed May 2, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta,
 5-257 GL/88

12 Claims

A pre-fabricated R.C.C. frame for door, window or for combination thereof, comprising pre-cast longitudinal and transverse arms of re-inforced cement concrete which are jointed at their ends by fastening means provided /formed at the ends of the arms in the course of casting thereof, each said arm having a rabbeted edge throughout its length such that in assembly of the arms, the frame so formed, is adapted to accommodate the edges of door/window shutter(s) within a continuous groove defined by the said rabbeted edges, and the longitudinal and/or the relevant ones of the said arms having securely provided inside thereof with female members adapted to receive and removably hold male members for fitting of hinges, latches and any other accessories for door/window, onto the frame.

Compl. specn. 16 pages.

Drgs. 3 sheets

CLASS :

163439

Int. Cl. : C 09 b 62/00, 67/00.

PROCESS FOR PREPARING LOW-SALT LIQUID AQUEOUS PREPARATIONS OF FIBER-REACTIVE DYE STUFFS.

Applicant : HOECHST AKTIENGESellschaft OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. FRITZ MEININGER, 2. KONRAD OPITZ, 3. JOACHIM SEMEL.

Application No. 489/Cal/85 filed June 28, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims

A process for preparing low-salt aqueous solutions of one or more fiber-reactive dyestuffs of the formula (1) of the accompanying drawings



Formula I

in which F represents the radical of a dyestuff chromophore of an anthraquinone, formazan, dioxazine, monoazo, disazo or trisazo dyestuff or of a phthalocyanine dyestuff or of a copper, chromium, cobalt, nickel or iron metal complex phthalocyanine, formazan, dioxazine or azo-dyestuff.

m is a whole number from 1 to 8.

n denotes a whole number from 1 to 3.

Z stands for a fiber-reactive group of the monohalogeno-symmetrical-triazinyl, monohalogenopyrimidine, dihalogenopyrimidine or trihalogenopyrimidine, monochloroquinoxaline, dichloroquinoxaline, dichlorophthalazine, dichloroquinazoline or dichloropyridazine series or their bromine or fluorine derivatives; of the sulfonyl-containing triazinyl, the sulfonyl-containing pyrimidine or ammonium-containing triazinyl series; or of the pyrimidine or ammonium-containing triazinyl series; or of the aliphatic series, and M denotes a hydrogen atom, an alkali metal or one equivalent of an alkaline earth metal,

by removal of alkali or alkaline earth metal halides, which comprises passing an alkali metal or alkaline earth metal halide-containing aqueous solution of said fiber reactive dyestuff(s), having a temperature of up to 70°C, as well as, separately from it, an aqueous electrolyte-containing solution whose initial conductivity is between 1 mS/cm and 10 mS/cm, through conduits which are formed by anion exchange membranes, intermediate spacing frames and cation exchange membranes in alternate and mutually parallel positions between an anodial and cathodial electrode, and which are isolated from each other in that wise that the halide-containing aqueous dye solution is passed through those

conduits which are limited in direction to the anode by an anion exchange membrane, and passing the electrolyte-containing solution through those conduits which are limited in the direction to the anode by a cation exchange membrane, while maintaining a direct voltage between oth electrodes.

Compl. specn. 35 pages.

Drgs. 6 sheets

CLASS : 63-B.

163440

Int. Cl. : H 02 k 3/00.

INSULATED ARMATURE COIL FOR DYNAMOELECTRIC MACHINE.

Applicant : GENERAL ELECTRIC COMPANY, OF 1 RIVER ROAD, SCHENECTADY 5, NEW YORK, UNITED STATES OF AMERICA.

Inventor : 1. HJAIMAR ALBERT OLSON.

Application No. 934/Cal/85 filed December 27, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

18 Claims

An improved armature coil for a dynamoelectric machine having a rotor which comprises a commutator formed by a cylindrical array of discrete electroconductive segments at one end of the rotor, an armature head at the other end of the rotor, a cylindrical core of magnetizable material disposed between said commutator and armature head, said core including a plurality of axially extending slots in its periphery, a plurality of multiple turn armature coils physically disposed in the slots of said core and electrically connected to selected commutator segments, each armature coil comprising a bundle of parallel, separately insulated conductors the distal ends of which are adapted to be connected to a predetermined set of said commutator segments, each of said conductors having a generally rectangular cross section and said bundle being bent to form a generally rectilinear winding having first and second relatively long and straight slot sections that are adapted to be inserted in two separate slots of said rotor core, said first and second slot sections being respectively joined at their armature head ends to first and second shorter sections which form obtuse angles therewith and which in turn extend convergently to the outboard end of the armature head where they join one another via an acutely bent loop, wherein the improvement comprises a first pre-formed tube of substantially non-compressible, non-thermoplastic dielectric material surrounding the exterior surface of essentially the whole of said first slot section and the exterior surface of at least part of said first shorter section of said coil, and a second pre-formed tube of the same material surrounding the exterior surface of essentially the whole of said second slot section and the exterior surface of at least part of said second shorter section of said coil, each of said tubes fitting snugly but exterior surface of the surrounded sections to provide electrical insulation between said bundle of conductors and the slot walls of said core, the wall of each tube having a unitary, seamless construction, being thin and flexible enough to bend in any plane without appreciable loss of either its physical or its dielectric integrity, and having a smooth enough interior surface to permit longitudinal expansion and contraction of said insulated conductors inside the tube.

Compl. specn. 25 pages.

Drgs. 3 sheets

CLASS : 155 A & E.

163441

Int. Cl. : D 06 m 11/00; 13/00; 15/00.

AN IMPREGNATING COMPOSITION FOR TREATING A FABRIC.

Applicant : NATIONAL RESEARCH DEVELOPMENT CORPORATION OF INDIA, 61, RING ROAD, LAJPAT NAGAR-III, NEW DELHI-110024, INDIA, A COMPANY REGISTERED UNDER THE INDIAN COMPANIES ACT

Inventors : ROMESH CHANDER GUPTA AND JIWAN SINGH RAWAT.

Application for Patent No. 313/Del/82 filed on 20th April, 1982.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent office Branch, New Delhi-110005.

5 Claims

An impregnating composition for use in a process for imparting dimensional stability and durable press characteristic to a textile web, said composition consisting of a known cross linking agent, known softeners and a catalyst characterized in that said catalyst consists in a combination of anhydrous calcium chloride, boric acid and an organic acid capable of maintaining the PH of the impregnating bath between 2 to 5.

Compl. specn. 9 pages.

CLASS : 98 B.

163442

Int. Cl. : B 01 j 3/00.

"APPARATUS FOR THE IMPREGNATION OF POROUS ARTICLES".

Applicant : ULTRASEAL INTERNATIONAL LIMITED, A GUERNSEY REGISTERED COMPANY OF UNIT 4, BRAYE ROAD INDUSTRIAL ESTATE, BRAYE ROAD, VALE, GUERNSEY, CHANNEL ISLANDS.

Inventor : PETER DAVID YOUNG.

Application for Patent No. 80/Del/85 filed on 31st January, 1985.

Convention date 2nd February, 1984/8402770/(U.K.).

Appropriate Office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

13 Claims

An apparatus for impregnating porous articles comprising a pressure vessel which includes a support member for supporting the articles in the vessel, slidable between an upper position for degassing the articles and a lower position for impregnating the articles, a release mechanism connect to the support member at the top portion of said vessel and operable from outside the pressure vessel to permit the support member to descend from the upper position to the lower position under gravity, and damping means at least partially within the pressure vessel for controlling descent of the support member.

Compl. specn. 12 pages.

Drgs. 6 sheets

CLASS : 32 F₂ (b).

163443

Int. Cl. C C 07 d 91/00.

"A PROCESS FOR THE PREPARATION OF TRIAZO-LYLTIAZOLE COMPOUNDS".

Applicant : PFIZER INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 235 EAST 42ND STREET, NEW YORK, STATE OF NEW YORK, UNITED STATES OF AMERICA.

Inventors : JOHN LAWRENCE LAMATTINA & CHRISTOPHER ANDREW LIPINSKI.

Application for Patent No. 124/Del/85 filed on 14th February, 1985.

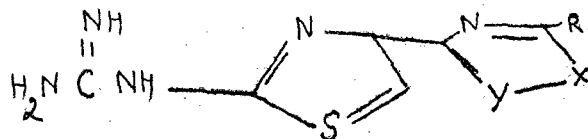
Ante-dated to 07 September, 1981.

Divided out of patent application no. 572/Del/81 dated 07 September, 1981.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

2 Claims

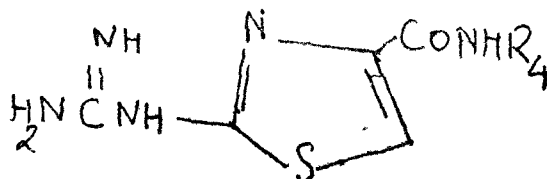
A process for the preparation of triazolylthiazole compound of formula I



Formula I

and the pharmaceutically acceptable acid addition salts thereof;

wherein X is NH; Y, S, N; R is hydrogen, hydroxymethyl, alkyl of 1 to 6 carbon atoms, or -NH₂; characterized in that a compound of the formula III



Formula III

wherein R₄ is -NH₂ is reacted with a compound of the formula RC(NH)OR₆ wherein R₆ is alkyl of the 1 to 3 carbon atoms in the presence of a base such as herein described and heating the resulting product and if desired, reacting the resulting compound of formula I

with a pharmaceutically acceptable acid to form a pharmaceutically acceptable salt.

Compl. specn. 19 pages.

Drg. 1 sheet

CLASS :

163444

Int. Cl.⁴ : B 01 D 49/00, 50/00.

"APPARATUS FOR TREATING GASEOUS EFFLUENTS TO REMOVE CONDENSABLE AND PARTICULATE IMPURITIES THEREFROM".

Applicant : HYDRO-QUEBEC, OF 75 DORCHESTER BOULEVARD WEST, MONTREAL, QUEBEC, CANADA H2Z 1A4, CANADIAN COMPANY.

Inventors : MICHEL GEORGES DROUET & RICHARD JURG MUNZ.

Application for Patent No. 262/Del/85 filed on 27th March, 1985.

Convention date 22nd October, 1984/466016/(Canada).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

5 Claims

Apparatus for treating gaseous effluents such as herein described to remove condensable and particulate impurities therefrom, which comprises a high temperature reactor in which said gaseous effluents are produced, inlet means connected to said reactor for feeding treatment material such as herein described into said reactor, means for heating the content of said reactor, a duct connected to said reactor of feed particulate material such as herein described into said reactor, said particulate material interacts with said treatment material, a screw conveyor mounted in said duct, and control means connected to said screw conveyor to adjust the speed of said screw conveyor so as to feed to said reactor an amount of said particulate material which is sufficient to meet the demand of the reactor, means for passing all said gaseous effluents in counter-current direction through the particulate material in said screw conveyor, the screw conveyor being provided with a specific pitch and diameter so as to adjust the velocity of the gaseous effluents through the particulate material in order that substantially all condensable and particulate impurities present in said gaseous effluents be trapped by said particulate material as said gaseous effluents travel through said duct.

Compl. specn. 9 pages.

Drg. 1 sheet

CLASS : 188, 70 C₅ & 2 A₂.

163445

Int. Cl.⁴ : C 03 c 25/04.

IMPROVED PROCESS FOR MAKING TRANSPARENT ELECTRICALLY CONDUCTING PATTERNS ON GLASS SUBSTRATES FOR ELECTRO-OPTICAL DISPLAY DEVICES.

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110 001, INDIA. AN INDIAN REGISTERED BODY INCORPORATED (ACT XXI OF 1860).

Inventors : SUKHWANT SINGH BAWA & SUBHASH CHANDRA.

Application for Patent No. 272/Del/85 filed on March 29, 1985.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

4 Claims

Improved process for making transparent electrically conducting patterns on glass substrate for electro-optical display devices/comprising masking the glass substrates to expose a desired pattern thereon, sputtering of indium-tin alloy thereon in a vacuum chamber, subjecting to a D.C. electrical discharge in the presence of indium-tin alloy plate target and removing the mask on the treated plate characterised in that the target used consists of a copper plate coated with an indium-tin alloy, the sputtering being carried out in the presence of oxygen and the electrical discharge used is of power level of 2 Watts per cm. square.

Compl. specn. 10 pages.

CLASS : 188.

163446

Int. Cl.⁴ : C 23 b 3/08.

"METHOD FOR THE MANUFACTURE OF AN ADHERENT COPPER FOIL".

Applicant & Inventor : STEVEN JULIUS KARWAN, A U. S. CITIZEN OF CANAL ROAD, GRIGGSTOWN, NEW JERSEY, UNITED STATES OF AMERICA.

Application for Patent No. 321/Del/85 filed on dated 17th April, 1985.

Appropriate Office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

13 Claims

A method for the manufacture of an adherent copper foil for printed circuit applications comprising the steps of :

- (A) immersing a copper foil in a bath consisting essentially of an aqueous solution of copper sulphate and sulfuric acid.
- (B) applying to the bath with said copper foil immersed therein, a continuous treatment of electric current, said treatment consisting essentially of a plurality of pulsing treatment cycles to cause the deposition of the surface of said copper foil of an adherent, irregular surface of improved bonding capability, each of said pulsing treatment cycles consisting essentially of said first peak current phase and a second base current phase;
 - (i) said peak current phase performed at a current density and for a duration sufficient to form on at least one surface of said foil a fully adherent nodular layer on said surface, said nodular layer consisting essentially of copper, such current density and duration insufficient however, to form a nodular layer that exhibits treatment transfer and requires further treatment to anchor said nodular layer to the surface of said foil;
 - (ii) said base current phase performed at a current density of a magnitude less than those of said peak current phase, and at a magnitude less than those of said peak current phase, and at a current density and for a duration sufficient to dispose over said nodular layer a thin, tightly adherent layer of smooth copper to interrupt the formation of said nodular layer, but insufficient to anchor said nodular layer to said foil surface; and
 - (iii) wherein said pulsing treatment cycles are each as short as milliseconds in total duration.

Compl. specn. 29 pages.

CLASS : 163447

Int. Cl.⁴ : F 01 N 1/04, 1/08.

"A SILENCER FOR COMBUSTION ENGINES, PARTICULARLY FOR VEHICLES."

Applicant : JOHANNES PEDERSEN, A DANISH CITIZEN OF HJULMAGERVEJ 5, DK-8800 VIBORG, DENMARK.

Inventor : LEIF LUND JENSEN.

Application for Patent No. 411/Del/85 filed on 16th May, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

5 Claims

A silencer for combustion engines, particularly for vehicles, the silencer comprising a cylindrical casing, a row of modular channel blocks mounted in the cylindrical casing, the modular channel blocks together forming and insert accommodated in the casing adapted to individual throttling and sound damping requirements, characterized in that the modular channel blocks are preshaped mutually different

elements with respect to throttling or sound damping abilities thereof, each of the modular channel blocks (16) constituting selected prefabricated units (2, 4), and are located in said row in said cylindrical casing, to constitute said insert, and in that modular channel blocks are disposed in axial abutting relationship so that the inserts is axially clamped between respective portions (10) of the casing.

Compl. specn. 12 pages.

Drg. 1 sheet

CLASS :

163448

Int. Cl.⁴ : F 16 J, 15/00.

"SEALING DEVICE FOR SEALING A SLOT BETWEEN A SHAFT AND A HOUSING."

Applicant : AKTIEBOLAGET SKF, OF S-415 50 GÖTEBORG, SWEDEN, A SWEDISH COMPANY.

Inventor : GUNNAR BERGLING.

Application for Patent No. 421/Del/85 filed on 22nd May, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

3 Claims

A device for sealing a slot between a shaft and a housing, the shaft being supported by a bearing for permitting misalignment of said shaft relative to said housing, said device comprising an elastic sealing member located in said slot and a comparatively rigid supporting member for supporting said elastic lip sealing member, said supporting member being located inside slot and below said lip sealing member characterised in that said lip sealing member is flexibly connected to said supporting member being movable radially in said housing and being provided with a substantially radially extending flange, a pair of annular grooves in said housing for radially receiving said flanges, whereby said supporting member is displaceable relative to said shaft and said housing and is axially connected within said grooves.

Compl. Specn. 6 pages.

Drg. 1 sheet.

CLASS : 35 C.

163449

Int. Cl.⁴ : C 04 b 7/16.

"A PROCESS FOR PREPARING AN EARLY HIGH STRENGTH CONCRETE COMPOSITION".

Applicant : LONE STAR INDUSTRIES, INC., CORPORATION OF THE STATE OF DELAWARE, ONE GREENWICH, CONNECTICUT 06830, UNITED STATES OF AMERICA.

Inventors : JOSEPH DAVIDOVITS & JAMES LINWOOD SAWYER.

Application for Patent No. 428/Del/85 filed on 28th May, 1985.

Convention date 1st February, 1985/473466/(Canada).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

5 Claims

A process for preparing an early high strength concrete composition comprising adding blast furnace slag to a reactant mixture consisting of alumine-silicate oxide (SiO_2 , Al_2O_3 , (n is the degree of polycondensation) with the aluminum cation in fourfold coordination, strong alkalis selected from the group consisting of sodium hydroxide and pota-

ssium hydroxide, water and a member selected from the class consisting of sodium and potassium polysilicate solutions, said reactant mixture having the following oxide mole ratio:

M_2O/SiO_2	0.20 to 0.36
SiO_2/Al_2O_3	3.0 to 4.12
H_2O/M_2O	12 to 20
M_2O/Al_2O_3	0.6 to 1.36

where M_2O represents a member selected from the class consisting of Na_2O , K_2O , and the mixture

(Na_2O , K_2O).

Compl. specn. 26 pages.

CLASS :

163450

Int. Cl.⁴ : F 16 J 15/16.

"A SEALING DEVICE PROVIDING THE UPSTREAM/DOWNSTREAM SEALING OF A VALVE."

Applicant : APPLICATIONS MECANIKES ET RONIERETTERIE INDUSTRIELLE (A.M.R.I.), A LIMITED COMPANY, OF "LES MERCURIALES" 40, RUE JEAN-JAURES, 93176 BAGNOLET GEDEX, FRANCE.

Inventors : JEAN-CLAUDE GARRIGUES & RENU LAULHE.

Application for Patent No. 446/Del/85 filed on 4th June, 1985.

Appropriate office for opposition proceedings (Rule, 4 Patents Rules, 1972) Patent Office Branch, New Delhi-5.

4 Claims

A sealing device for the upstream/downstream sealing of a valve comprising :

- a tubular body (1) provided with a bore (2) and having a shoulder (3) with steep side,
- a valve member (6) movable inside the bore of the body and having at its periphery a sealing surface of a conoid shape,
- a sealing packing on which comes to bear the sealing surface of the valve at the end of the valving stroke, said sealing packing comprising an annular dynamic sealing element (14) having a low modulus of elasticity to traction along its circumference and an inner diameter substantially equal to the mean diameter of the sealing surface (12) of the valve member (6) and a coronal metal membrane having an inner edge portion (16) sealingly connected to said annular element (14) and an outer edge portion having a flat radial part (17) applied against the steep side of the bore shoulder of the body so as to provide static sealing therewith, and
- a clamping device (19) mounted inside said bore (2) and adapted for axially clamping in an homogeneous way, the flat part (17) of the membrane (15) so as to provide said static sealing, said steep side forming with the clamping device an annular groove in which the annular element is radially guided and axially retained and the central part of said metal membrane is adapted so as to provide radial elasticity between said outer (17) and inner (16) edge

portions and, consequently, radial mobility of said annular element, characterised in that said annular sealing element (14) is made from solid metal having a substantially Z-shaped section and comprises an inner annular part with substantially rectangular section, an annular external part (36) axially offset with respect to the annular inner part (35) and on the side opposite the valve member (6) and a substantially conical connecting part (37) connecting the outer annular part (36) to the inner annular part (35) and in that said membrane is welded by its inner edge portion (16) to a radial face (39) of the inner annular part (35) of the annular sealing element (14), situated on the side opposite said external part (36).

Compl. specn. 16 pages.

Drgs. 3 sheets

CLASS : 146-C.

163451

Int. Cl.⁴ : H 04 n 1/22.

AN APPARATUS FOR PRODUCING AND REPRODUCING HAYLOGRAMS.

Applicant : KARL RUBENBERGER, OF DALL-ARMSTRASSE 5, 8058 ERDING, FEDERAL REPUBLIC OF GERMANY.

Inventor : GUNTHER DAUSMANN.

Application No. 440/Cal/84 filed June 22, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

14 Claims

An apparatus for producing an encoded information carrier, comprising a substrate provided with a photograph representing a set of photographic information and with at least one hologram which is superposed on said photograph and represents a first set of hologram information, which consists of holographically recorded phase modulation information and is superposed on said first set of hologram information, which apparatus comprises a photographic recording system adapted to produce said photograph on said substrate, and a holographic recording system adapted to produce a hologram on said substrate and comprising an optical modulator representing said first set of hologram information and means for directing a reference beam on said substrate and for directing an object beam passing through said optical modulator on said substrate, characterized in that an optical phase modulator for producing in a beam of incident light a set of phase disturbances is disposed in the path of said reference beam or is disposed in the path of said object beam between said optical modulator representing said first set of hologram information and said hologram plane and said apparatus optionally including means for directing a reference beam on said information carrier to produce a modulated object beam containing information that is represented by said at least one hologram, characterized in that an optical decoder is disposed in the path of said modulated object beam and adapted to selectively eliminate from said modulated object beam said information of one of said first and second sets of hologram information and to deliver a decoded modulated object beam containing said information of the other of said first and second sets of hologram information, for decoding and reproducing hologram information provided on said encoded information carrier.

Compl. specn. 20 pages.

Drgs. 4 sheets

CLASS : 137-A & E.

163452

Int. Cl. : G 10 d 3/00, 3/10, 1/00.

APPARATUS FOR PRODUCTION OF WOUND STRINGS SUITABLE FOR USE IN MUSICAL INSTRUMENTS.

Applicant : MUSICAL STRING RESEARCH BUREAU, OF P.O. BAIDYABATI, G.T. ROAD, DISTRICT HOOGHLY, WEST BENGAL, INDIA.

Inventor : SRI UMA PROSAD MUKHERJEE.

Application No. 5/Cal/85 filed January 2, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

An apparatus for producing wound strings suitable for use in musical instruments comprising a framework constituted by a base and two supporting-cum-holding means, mounted on the base, the said two supporting-cum-holding means being longitudinally spaced from each other to accommodate the desired length of a wound string to be produced, one of the said supporting-cum-holding means having journaled there within a rotatable holding means for holding one end of a flat/round core wire of desired characteristics, such as herein described, while the other supporting-cum-holding means being constituted by a coil spring to hold the other end of the core wire under tension, the said coil spring being rotatably supported by an L-shaped bracket adjustably mounted on the said base, the said rotatable holding means being adapted to be operatively connected to a drive source for rotation thereof, as and when desired, the arrangement being such that on rotating the said rotatable holding means by the drive source, a flat/round core wire held in between the said holding means and the said coil spring is caused to be rotated, and a winding wire of desired characteristics, such as herein described, is caused to be wound around the said core wire with the help of a complementary adaptor/winder, constituted by a holding block and a guiding block e.g. made of wood the latter being adjustably fitted on the former e.g. by being screwed to each other, so as to adjust the clearance between the said two blocks depending on the diameter of the winding wire, as required such that the winding wire to be wound around the said core wire is caused to be guided through the said clearance between the said two blocks of the adaptor/winder, and the said adaptor/winder is caused to be moved linearly in relation to the rotating core wire.

Compl. specn. 13 pages.

Drg. 1 sheet

CLASS : 206-E.

163453

Int. Cl. : H 03 f 3/04.

BRIDGE AMPLIFIER.

Applicant & Inventors : VALERY MIKHAILOVICH NAZAROV OF ULITSA FLOTSKAYA KV. 4137 KORPUS, 3, MOSCOW, USSR : (2) OLEG VIANOROVICH DOGADIN OF ULITSA NARODNOGO OPOLCHENIA, 25, KV. 21, MOSCOW, USSR.

Application No. 88/Cal/85 filed February 8, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

1 Claim

A bridge amplifier comprising two inversely phased input signal source having a common point, a bridge circuit composed of two heteropolarly controlled branches, the first branch comprising two linear unipolarly controlled amplifying elements and the second branch comprising two gating unipolarly controlled amplifying elements, and a cur-

rent source whose input is connected to the common point of the first branch of the bridge circuit, while the output thereof is connected to the common point of the input signal sources each control input of the current source being connected to a respective common output of the adjacent linear and gating amplifying elements, the inputs of the adjacent linear and gating amplifying elements being connected in pairs to a respective input signal source, the supply voltage being fed to the common points of respective linear and gating amplifying elements characterized in that said current source is controllable by a set of parallelly disposed resistors are connected between said input and output of the current source through a transistor and diode and a set of parallelly disposed resistors are connected between the said control inputs of the current source.

Compl. specn. 7 pages.

Drg. 1 sheet

CLASS : 116-G.

163454

Int. Cl. : D 21 f 9/00.

IMPROVEMENT IN PAPER MACHINE HEADBOX.

Applicant : BELOIT CORPORATION OF P.O. BOX 350, BELOIT, WISCONSIN 53511, U. S. A.

Inventors : 1. JAMES LEROY EWALD, 2. JOSE' JUAN ANTONIO RODAL.

Application No. 248/Cal/85 filed April 2, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

18 Claims

A paper machine element for use in a headbox for delivering stock to a forming surface, the headbox having a slice chamber and a slice opening, the element comprising : a trailing element for positioning in a slice chamber;

said element to extend transversely of the headbox and having a greater structural strength and stiffness in the machine direction than in the cross-machine direction at the upstream end strength and having a greater structural stiffness in the cross-machine direction than in the machine direction at the downstream end to minimize instability so that the element resists deflection in the cross-machine direction by transient pressure variations and offers low resistance to deformation in the fluid flow stream for balancing pressure forces on opposite sides of the element;

and being anchored in the slice chamber at the upstream end with the downstream end to be unattached and constructed to be self-positionable so as to be responsive to forces exerted therein by the stock flowing over the surfaces of the element.

Compl. specn. 18 pages.

Drg. 1 sheet

CLASS : 126-C.

Int. Cl. : G 01 r 29/00.

MAXIMUM DEMAND ELECTRIC METER.

Applicant & Inventor : RATAN SINGH, OF 19 ROOP-NARAYAN NANDAN LANE, CALCUTTA-700025, WEST BENGAL, INDIA.

Application No. 314/Cal/85 filed April 25, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

A maximum demand electric meter comprising essentially an ammeter characterised in that an additional hand is mounted on the spindle of the ammeter but below the indicator hand, the additional pointer or indicator hand having a projecting pins intermediate its length, the usual indicator hand of the ammeter being adapted to press against the pin and move the additional hand along with itself to a position corresponding to the demand and leave the additional indicator hand at the said position while returning towards its normal position of rest or a position corresponding to lesser demand.

Compl. specn. 6 pages.

Drg. 1 sheet

CLASS : 108-B₂ (b) & C₃.

163456

Int. Cl. : C 21 b 13/14; C 21 c 5/56.

COMBINED MELTING GASIFIER AND A DIRECT REDUCTION SHAFT FURNACE SHAFT.

Applicants : (1) KORF ENGINEERING GMBH. OF NEUSSER STRASSE 111, D-4000 DUSSELDORF 1, FEDERAL REPUBLIC OF GERMANY; (2) VOEST-ALPINE AKTIENGESellschaft, WERKSGELANDE, A-4010 LINZ, AUSTRIA.

Inventors 1. KLAUS LANGNER, 2. GERO PAPST, 3. ROLF HAUKE, 4. MICHAEL NAGL.

Application No. 400/Cal/85 filed May 25, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

17 Claims

A combined melting gasifier and a direct reduction shaft furnace structure for reducing lumpy iron ore or iron oxide pellets, comprising a base adapted to support a charging column of ore in the shaft furnace, at least one discharge port being formed in the base for discharging sponge iron particles produced by reduction of said ore, and at least one annular intake being formed in said shaft furnace to convey the reduction gas supplied by the gasifier to the charge in the lower part of the charging column, and mechanical means disposed at the base of said shaft furnace for causing the continuous reciprocal movement of the reduced charge particles in an area adjacent said annular intake for the reduction gas.

Compl. specn. 15 pages.

Drgs. 2 sheets

CLASS : 1-C.

163457

Int. Cl. : A 61 h 13/00.

PROCESS FOR THE PREPARATION OF GUAR GUM DERIVATIVE SUITABLE FOR USE AS ADHESIVE IN TWISTLESS SPINNING OF JUTE.

Applicant : INDIAN JUTE INDUSTRIES' RESEARCH ASSOCIATION, OF 17, TARATOLA ROAD, CALCUTTA-700088, WEST BENGAL, INDIA.

Inventors : 1. DR. TAPAN KUMAR GUHA ROY, 2. DR. SRINIVASACHARI RAMANUJACHARI RANGA-NATHAN.

Application No. 442/Cal/85 filed June 12, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

A process for the preparation of a guar gum derivative suitable for use as adhesive in twistless spinning of jute or any other textiles containing jute, comprising preparing an aqueous solution of guar gum by thoroughly mixing guar gum with water, treating the said solution with sodium hypochlorite at a pH of 8 to 12 at ambient temperature, (e.g. 25 to 30°C) for 3 to 5 hours and adjusting the pH of the reaction product, by acidifying the same, to 5 to 6.5, removing the excess oxidising agent from the reaction product in a manner such as herein described.

Compl. specn. 9 pages.

Drg. Nil

CLASS : 32-E.

163458

Int. Cl. : C 08 f 5/00, 7/00.

PROCESS FOR PRODUCING A HOT MELT PRESSURE-SENSITIVE ADHESIVE.

Applicant : JOHNSON & JOHNSON PRODUCTS, INC. OF 501 GEORGE STREET, NEW BRUNSWICK, NEW JERSEY 08903, UNITED STATES OF AMERICA.

Inventors : 1. ROBERT L. SUN, 2. JAMES F. KENNEY.

Application No. 54/Cal/85 filed September 16, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims

A process for producing a hot melt pressure-sensitive adhesive comprising (A) charging the following monomers to a suitable reaction vessel in the productions indicated :

Starting Monomer

2-ethylhexyl acrylate (2-EHA)

n-butyl acrylate (BA)

isobutyl methacrylate (IBMA)

N-vinyl caprolactam (NVCL)

% By Polymer Weight

20—80

0—45

15—25

10—25

under an inert atmosphere and in the presence of a polymerization catalyst such as hereinbefore described and (B) subjecting the thus formed reaction mixture to a temperature above the activation temperature of the catalyst for a period of time sufficient to produce said adhesive, and if desired sterilizing the adhesive.

Compl. specn. 22 pages.

Drg. Nil.

CLASS : 32-F₃.

163459

Int. Cl. : C 07 c 47/52.

AN IMPROVED PROCESS FOR THE PREPARATION OF ETHYL β-METHYL-β-PHENYL-CLYCIDATE' COMMONLY KNOWN AS 'ALDEHYDE C-16.

Applicant : RECKITT & COLMAN OF INDIA LIMITED OF 41, CHOWRANGHEE ROAD, CALCUTTA-700071, STATE OF WEST BENGAL, INDIA.

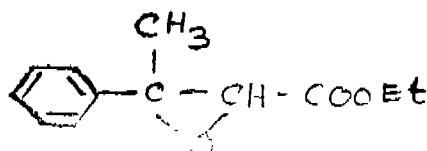
Inventors : 1. DR. SURENDRA PRASAD BHATNAGAR, 2. DR. AJAI PRAKASH, 3. DR. SATISH CHANDRA MISRA, 4. DR. SUSHEEL KUMAR SURI, 5. DR. RAMANUJAM SRINIVASA PRASAD.

Application No. 706/Cal/85 filed October 7, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

Improvement in or relating to the process for the preparation of 'aldehyde C-16' of formula I of the accompanying drawing



Formula I

which comprises stirring acetophenone and ethyl chloroacetate characterised in that the reaction is carried out in the absence of any solvent and in presence of base such as alkali metal, alkali metal alkoxide, alkali metal amide and alkali metal hydride at a temperature of -5 to 30°C under nitrogen atmosphere.

Compl. specn. 4 pages.

Drg. 1 sheet

CLASS : 134-D.

163460

Int. Cl. : B 62 d 15/00.

A DRIVING AND STEERING DEVICE PARTICULARLY SUITABLE FOR BATTERY-POWERED THREE-WHEELED VEHICLES.

Applicant & Inventor : HEINRICH HUSS, OF LIEBIG-STER, 1, D-6054 RODGAU 6, WEST GERMANY.

Application No. 875/Cal/85 filed December 5, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

10 Claims

A driving and steering device, more especially for a battery-powered three-wheeled vehicle, serving as a structural unit having at least one drive motor for driving the front wheel and/or the two rear wheels, wherein, at the front portion (A) of an integrated metal and plastics material car body/chassis supporting the rear wheels, a carrier member (1) is secured to the steering mechanism (2), which is spaced from said carrier member (1) yet is connected thereto, and said carrier member (1) is secured to a sleeve (5) which accommodates the bar (3) of a frame (4), and wherein the frame (4) supports a drive comprising an electric motor (6) and gears (Z1, Z2, Z3, Z4) and rotatably supports at least one drive wheel (7) which is connected to the motor.

Compl. specn. 12 pages.

Drgs. 4 sheets

CLASS :

163461

Int. Cl. : B 60 k 17/08.

AN IMPROVED SCOOTER ENGINE DRIVE SYSTEM.

Applicant & Inventor : VENKATACHALA ACHARI SUBRAMANIAM, 4A/409, N.G.O. COLONY, COIMBATORE 641022, TAMIL NADU, INDIA, INDIAN NATIONAL.

Application No. 14/Mas/85 filed January 7th 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch,

7 Claims

An improved scooter engine drive system comprising a train of three gears consisting of a driver gear, a driven gear, and an intermediate idle gear intermeshing with the driver and driven gears, the driver gear thus transmitting power from the engine to the clutch of the scooter through the idle and driven gears and thence to the gear box of the scooter, the idle gear being made of a material such as nylon, fibre or hylam and having a module or DP. Pre. Angle of 20° or 14.5° with a helical or spur configuration of 20°±5° and 64±5 teeth, while the driver and driven gears are metallic, each having the same module or DP. Pre. Angle of 20° or 14.5° with a helical or spur configuration of 20°±5°, the driven gear, however, having 24 5 and the driven gear having 72±5 teeth.

Compl. specn. 8 pages.

Drg. 1 sheet

CLASS :

163462

Int. Cl. : B 23 D 77/12.

"REAMER."

Applicant & Inventor : GENNADY YAKOVLEVICH POTEMKIN, OF OVEKHOVY PROEZO, 19, KV. 19, MOSCOW, U.S.S.R., A CITIZEN OF U.S.S.R.

Application for Patent No. 460/Del/85 filed on 10th June, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

2 Claims

A reamer with teeth having a cutting portion and a calibrating portion conjugated with one another, wherein at least part of the rear surface of the latter portion is in the form of a strip diverging in the direction away from a head portion of the reamer, each one of said teeth having its front angle smoothly decreasing in the direction away from the head portion of the reamer, the value of reduction of the front angle of the tooth over the entire length thereof being at least 8°.

Compl. specn. 7 pages.

Drg. 1 sheet

CLASS :

163463

Int. Cl. : C 08 F 120/38.

"A METHOD TO REPAIR CATIONIC DYEABLE POLYESTER HAVING IMPROVED FIBRE PROPERTIES."

Applicant : THE DIRECTOR, SIR PADAMPAT RESEARCH CENTRE, A DIVISION OF J. K. SYNTHETICS LTD., JAYKAYNAGAR, KOTA-324003, RAJASTHAN, INDIA, AN INDIAN RESEARCH INSTITUTE.

Inventors : ASHOK AMRUT VAIDYA & GULSHAN AHUJA.

Application for Patent No. 492/Del/85 filed on 24th June, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

3 Claims

A process for the manufacture of cationic dyeable polyester, which comprises incorporation of sodium salt of 5-sulfosio-phthalic acid or its ester derivative to a polyesterification reaction medium characterized in that 0.01 to 1%

by weight of diethylene glycol inhibitor such as sodium carbonate or sodium hydroxide is added therewith and that the reaction is continued till the melt viscosity of the modified polyester corresponds to the melt viscosity of unmodified polyester.

Compl. specn. 17 pages.

CLASS :

163464

Int. Cl.⁴ : B 01 D 33/14.

"BELT FILTER APPARATUS FOR SEPARATING LIQUID FROM SOLID MATERIAL."

Applicant : B. V. MACHINEFABRIEK v/b PANNEVIS & ZN, OF ELEKTRONWEG 24, 3542 AC UTRECHT, THE NETHERLANDS, A DUTCH COMPANY.

Inventors : HENDRICUS HEMMES SCHIPPER.

Application for Patent No. 527/Del/85 filed on 4th July, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

11 Claims

A belt filter apparatus for separating liquid from solid material comprising a frame, an endless conveyor belt guided around drums journaled in the frame and at least one casing mounted in the frame so as to be below the upper run of the belt, wherein said casing is capable of being partly evacuated for the purpose of extracting liquid from material laying on the conveyor belt during operation through holes in the conveyor belt, said casing being pivotable about a pivot with respect to the frame between an operation in which a cover of the casing having at least one passage for the fluid is in contact with the underside of the upper run of the conveyor belt and a cleaning position in which the casing is turned downwards in a direction away from the upper run of the conveyor belt, characterized in that the cover of said casing is fixed in relation to the upper run of the belt, the casing sealingly abuts said fixed cover in the operating position of the apparatus and said casing is connected to said frame by a pivotable connection whereby in the cleaning position the casing is moved away from said fixed cover which remains in its relationship with the upper run of the belt.

Compl. specn. 12 pages.

Drgs. 2 sheets

CLASS :

163465

Int. Cl.⁴ : A 61 M 5/00.

"THE REPEATER GLASS HYPODERMIC INJECTION SYRINGE."

Applicant & Inventors : BALDEV KRISHAN SEHGAL, 47, PUSA ROAD (S. VASWANI MARG), NEW DELHI-110005, AND AJAY SEHGAL, 47, PUSA ROAD (S. VASWANI MARG), NEW DELHI-110 006. BOTH INDIAN CITIZENS.

Application for Patent No. 566/Del/85 filed on 18th July, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

12 Claims

A repeater glass hypodermic injection syringe, comprising a glass barrel (A) with flange (C) and nozzle and a glass plunger (P) with its glass button (B), characterised in that the said glass barrel is provided at its lower end

with a ring (R) and a matching ring-collar (TR) having a miniature valve-block (V) placed between them, and two metallic rings, the first being provided at the upper end of the barrel and the second around the neck of the said plunger with a compression spring (MS) being placed between the barrel flange and the plunger neck, the said valve-block provided with an inflow canula to which an injectile container is fitted with suitable fitting arrangement.

Compl. specn. 11 pages.

Drgs. 3 sheets

CLASS :

163466

Int. Cl.⁴ : E 21 C 47/00, 41/06.

"DEVICE FOR COLLECTING MANGANESE NODULES OR THE LIKE ON THE OCEAN FLOOR."

Applicant : PREUSSAG AKTIENGESELLSCHAFT, OF 1000 BERLIN, 3000 HANNOVER, FEDERAL REPUBLIC OF GERMANY A COMPANY ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY.

Inventors : HANS AMANN & AXEL BATH.

Application for Patent No. 618/Del/85 filed on 31st July, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

8 Claims

A device for collecting manganese nodules or the like from the ocean floor comprising :

a frame (4) to be towed over the ocean floor in a direction of traction (11);

a cylinder (1) mounted for rotation about a horizontal axis (3) on said frame;

the cylinder having an outside surface, a front half of said cylinder facing the direction of traction, a rear half of said cylinder away from the direction of traction;

the cylinder rotating in relation to the direction of traction;

a semicylindrical screen (8) surrounding the rear half of said cylinder;

hook-like rods (9) mounted on said screen terminating at their ends in prongs (10) pointing downward and forwardly in direction of traction, the prongs being axially spaced along the cylinder and positioned to dig and cut under the nodules;

means mounted forwardly of said cylinder for conveying nodules picked up by said cylinder; and brushes on the surface of said cylinder comprising bristles (2) aligned in ribs (26), the bristles extending radially outward of the surface to from brush bottoms, the brush bottoms being spaced from the screen, rods and prongs, for providing a distance for nodules between the brush bottom and screen such that nodules are transported between the brush bottom and screen, the brushes being for transporting manganese nodules from the ocean floor after the nodules are cut under by the prongs to said conveying means

Compl. specn. 10 pages.

Drgs. 3 sheets

CLASS :

163467

Int. Cl.⁴ : B 66 B 21/04.

"DEVICE FOR TRANSPORTING LOADS BETWEEN VARIOUS ELEVATIONS."

Applicant & Inventors : LEON A. MCCOY, A U. S. CITIZEN OF BELTIMORE, MARYLAND 21218, UNITED STATES OF AMERICA.

Application for Patent No. 710/Del/85 filed on 29th August, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

8 Claims

A device for transporting loads between various elevations comprising :

a stairway means, said stairway means consisting of a plurality of tread members, a plurality of riser members, and an plurality of hinges means, said stairway means extending from a first elevation to a second elevation, each hinge means of said plurality of hinge means in turn transversely, affixed by hinges on one of said tread members to one of said riser members, said transverse affixed by hinges being provided alternately between the meeting point of the lowermost transverse edge of each said riser member and the rearmost transverse edge of the adjacent said tread member, and between the meeting point the forwardmost transverse edge of each said tread member and the uppermost transverse edge of each said riser member, and between the uppermost transverse edge of the topmost riser member of said stairway means and said second elevation, the lowermost distal end of said stairway means being conventionally affixed at the said first elevation; and

a mechanism means, said mechanism means consisting of plurality of slots, a power source, a power transmission, and a housing a plurality of hinge pin extension being integral and monolithic extension of each said pin extension being suitably located within and supported by respective slots of said plurality of slots equally situated on each side of said stairway means, said mechanism means being suitably enclosed in said housing means, said power transmission means transmitting motion from said power source to said plurality of hinge pin extension in said plurality of slots, said mechanism means

thereby converting said stairway means into ramp means, said ramp means having a ramp-like configuration.

Compl. specn. 25 pages.

Drgs. 4 sheets

CLASS :

163468

Int. Cl.⁴ : E 21 B 33/00.

"A METHOD OF INSULATING CASING IN A WELL-BORE".

Applicant : NL INDUSTRIES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW JERSEY, UNITED STATES OF AMERICA, RESIDING AT 1230 AVENUE OF THE AMERICAS, NEW YORK, NEW YORK 10020, UNITED STATES OF AMERICA.

Inventors : CLAUDE MALCOLM FINLAYSON, WILBUR SHERREL MARDIS & FORREST ANTHONY SCEARCE.

Application for Patent No. 756/Del/85 filed on 16th September, 1985.

Ante-dated to 2nd July, 1982. Convention date 16 November, 1981/8134461 (UK).

Divisional to application for patent no. 498/Del/82 dated 2-7-82.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

11 Claims

A method of insulating casing in a wellbore which comprises pumping an oil-base packer fluid in an annular space within said wellbore under low shear conditions for gelling said packer fluid, the improvement comprises a packer fluid having an oil phase of the kind herein described and from 6 to 50 pounds per barrel of said fluid of an organophilic clay gellant comprising the reaction product of an organic cationic compound of the kind herein described, an organic anion of the kind herein described, and a smectite-type clay having a cation exchange capacity of at least 75 milli-equivalents per 100 grams of said clay such that an organic cation-organic anion complex is intercalated with the smectite-type clay and the cation exchange sites of the smectite-type clay are substituted with the organic cation.

Compl. specn. 31 pages.

Drg. 1 sheet

CLASS :

163469

Int. Cl.⁴ : C 09 K 7/06, E 21 B 33/00, 33/12.

"A METHOD FOR FORMING A CELLED OIL BASE FLUID".

Applicant : NL INDUSTRIES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW JERSEY, UNITED STATES OF AMERICA, RESIDING AT 1230 AVENUE OF THE AMERICAS, NEW YORK, NEW YORK 10020, UNITED STATES OF AMERICA.

Inventors : CLAUDE MALCOLM FINLAYSON, WILBUR SHERREL MARDIS AND FORREST ANTHONY SCEARCE.

Application for Patent No. 757/Del/85 filed on 16th September, 1985.

Ante-date to 2nd July, 1982.

Convention date 16th November, 1981/8134461/81(U.K.).

Divisional to application no. 498/Del/82 filed on 2nd July, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

10 Claims

A method for forming a gelled oil base fluid comprising mixing an oilphase of the kind herein described with from 1 to 50 pounds per barrel of said fluid of an organophilic clay gellant comprising the reaction product of organic cationic compound, an organic anion and a smectite-type clay having a cation exchange capacity of at least 75 milliequivalents per 100 grams of said clay such that an organic cation-organic anion complex is intercalated with the smectite-type clay and the cation exchange sites of the smectite-type clay are substituted with the organic cation at a temperature of from -20°F to 500°F under conditions of low shear mixing until the oil-base fluid gells.

Compl. specn. 29 pages.

Drg. 1 sheet

CLASS :

163470

Int. Cl.⁴ : B 65 B 51/10, B 65 D 53/00.

DUST REMOVAL DEVICE FOR USE WITH APPARATUS FOR HEAT-SEALING TOGETHER CONFRONTING WALLS OF THERMOPLASTIC BAGS OR SACKS.

Applicant & Inventor : RODRIC NORMAN OF BRITISH NATIONALITY OF 19 CHEMIN DU BLANC CAILLOU, B-1420 BRAINE-L' ALLEUD, BELGIUM AND JEANNE

JOSEE NORMAN NEE JEANNE JASEC NEVEN, OF BELGIAN-NATIONALITY OF 19, CHEMIN DU BLANC CAILLOU, B-1420 BRAINE-L'ALLEUD, BELGIUM.

Application for Patent No. 229/Del/86 filed on 12 March, 1986.

Divided out of Patent application No. 916/Del/82 dated 15 Dec. 1982; Conventional date April 27, 1982/8212196/82(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

6 Claims

Dust removal device adapted to be mounted on the drive means of apparatus for heat sealing together confronting side walls of thermoplastic bags or sacks, said device being located in the path of transport of said bags or sacks to said apparatus, which device comprises two guide means for guiding the upper corner of each bag and a projection integral with a cross-beam and located in the path of the bag or sack for impingement therewith, said projection being provided with a notch for temporarily retaining the upper corner of the bag or sack it has impinged against said projection whereby the bag or sack is caused to open and to continue along its path by passing with its upper edges on respective sides of the projection at a place at which said cross-beam is provided with a duct for directing compressed air against the inner edge of the bag for removing dust and dirt therefrom prior to heat sealing.

Compl. specn. 9 pages.

Drgs. 5 sheets

R. A. ACHARYA,
Controller General of Patents,
Designs and Trade Marks.

163434

163453

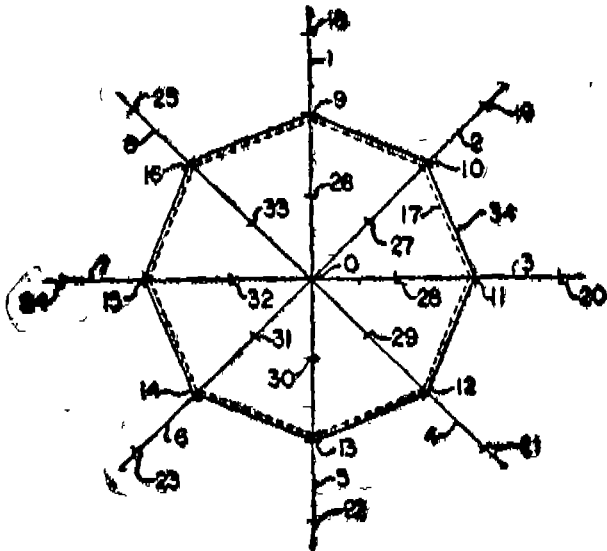


FIG. 1

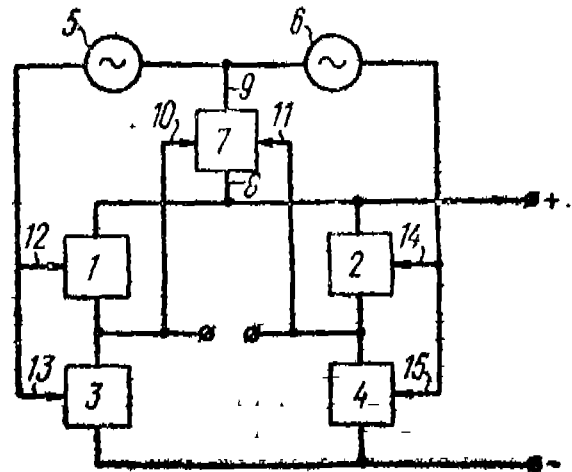


FIG. 1

426/Cal/94

163435

163454

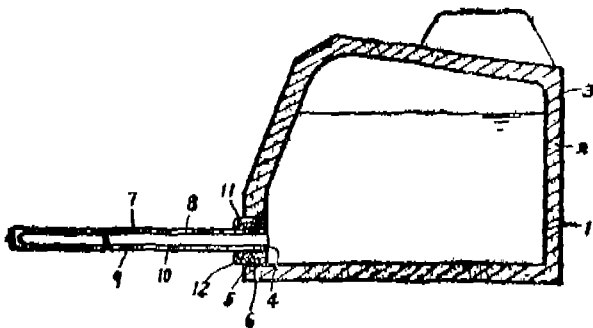
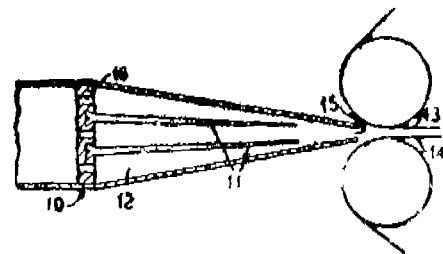


FIG. 1



163440

163455

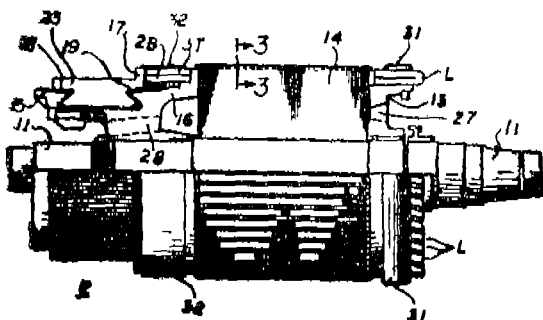
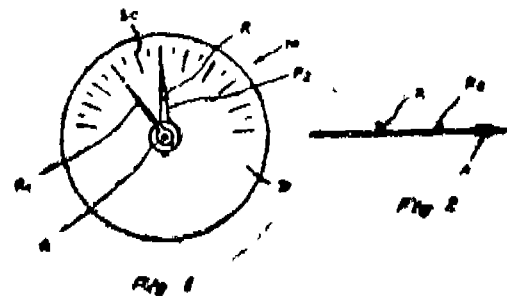
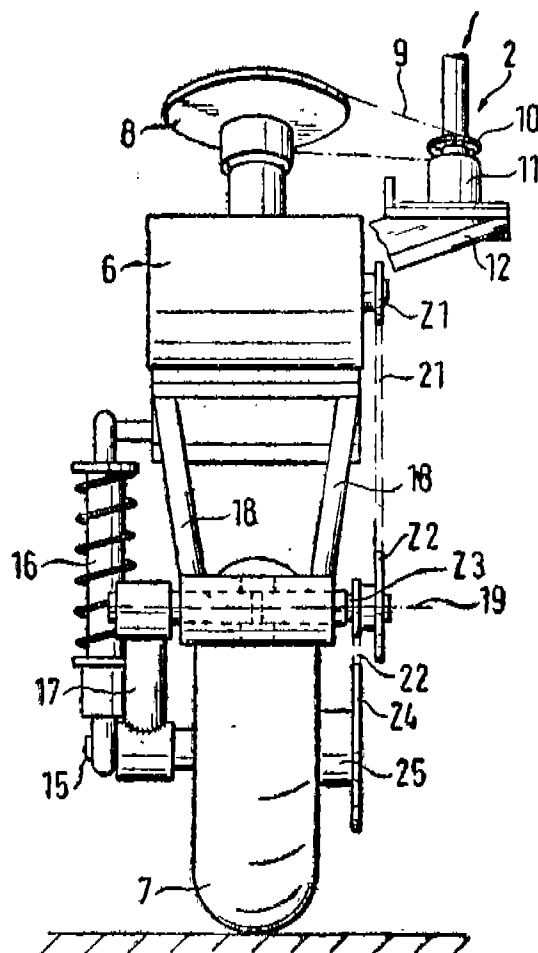


FIG. 1



163460



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